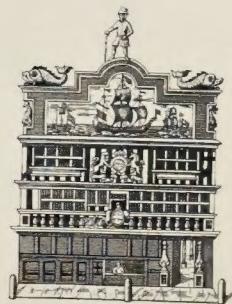


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BOIES PENROSE II



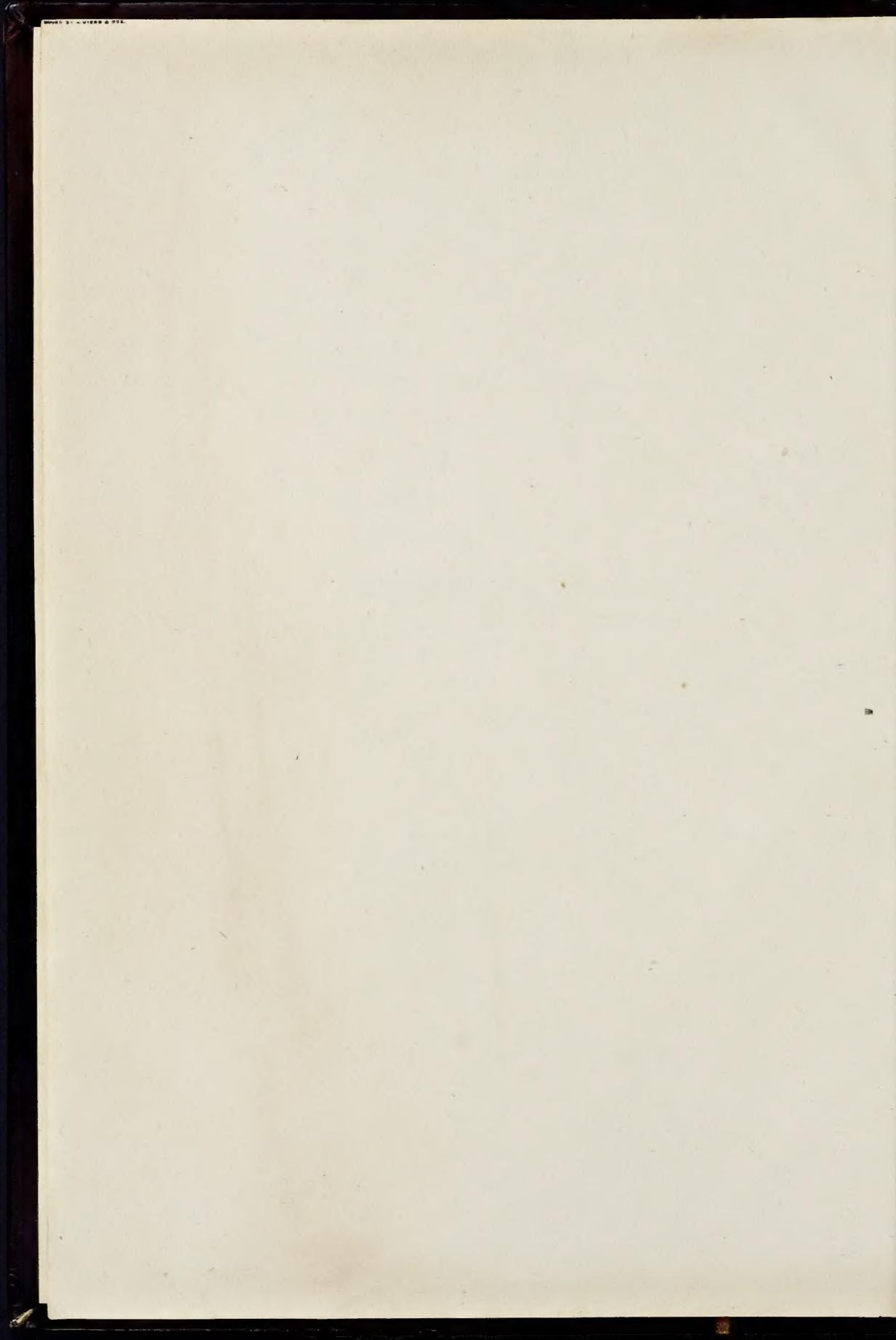
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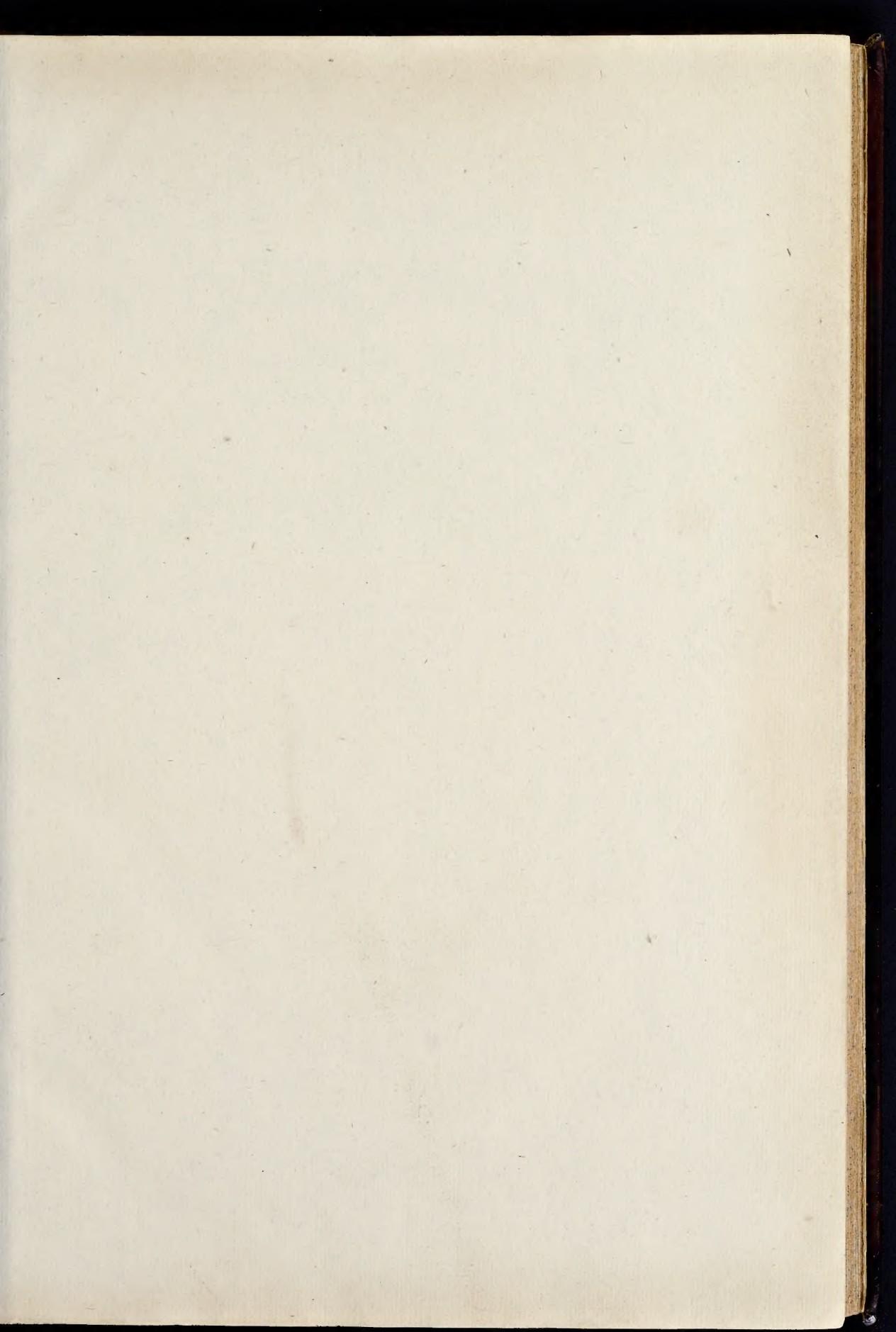
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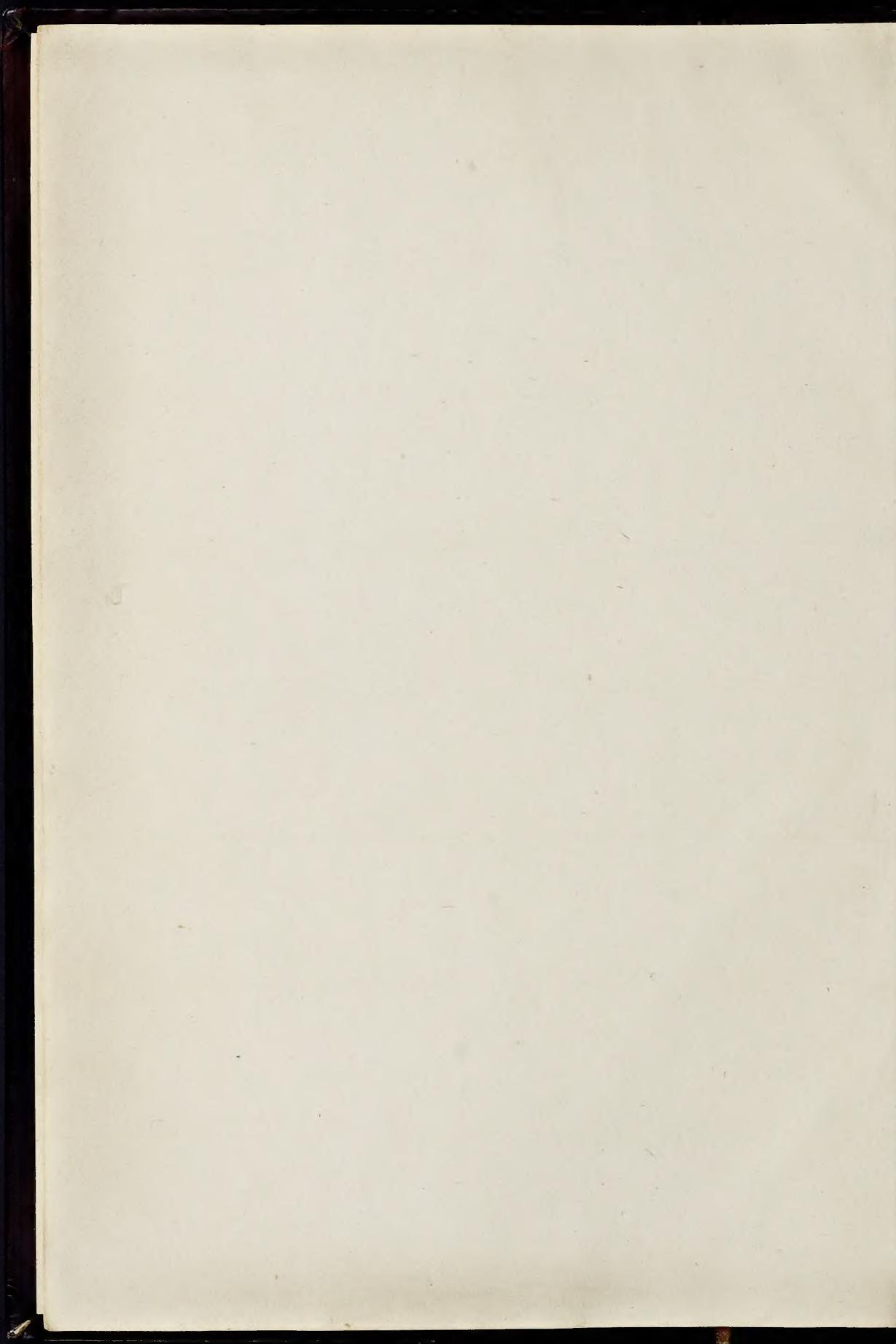
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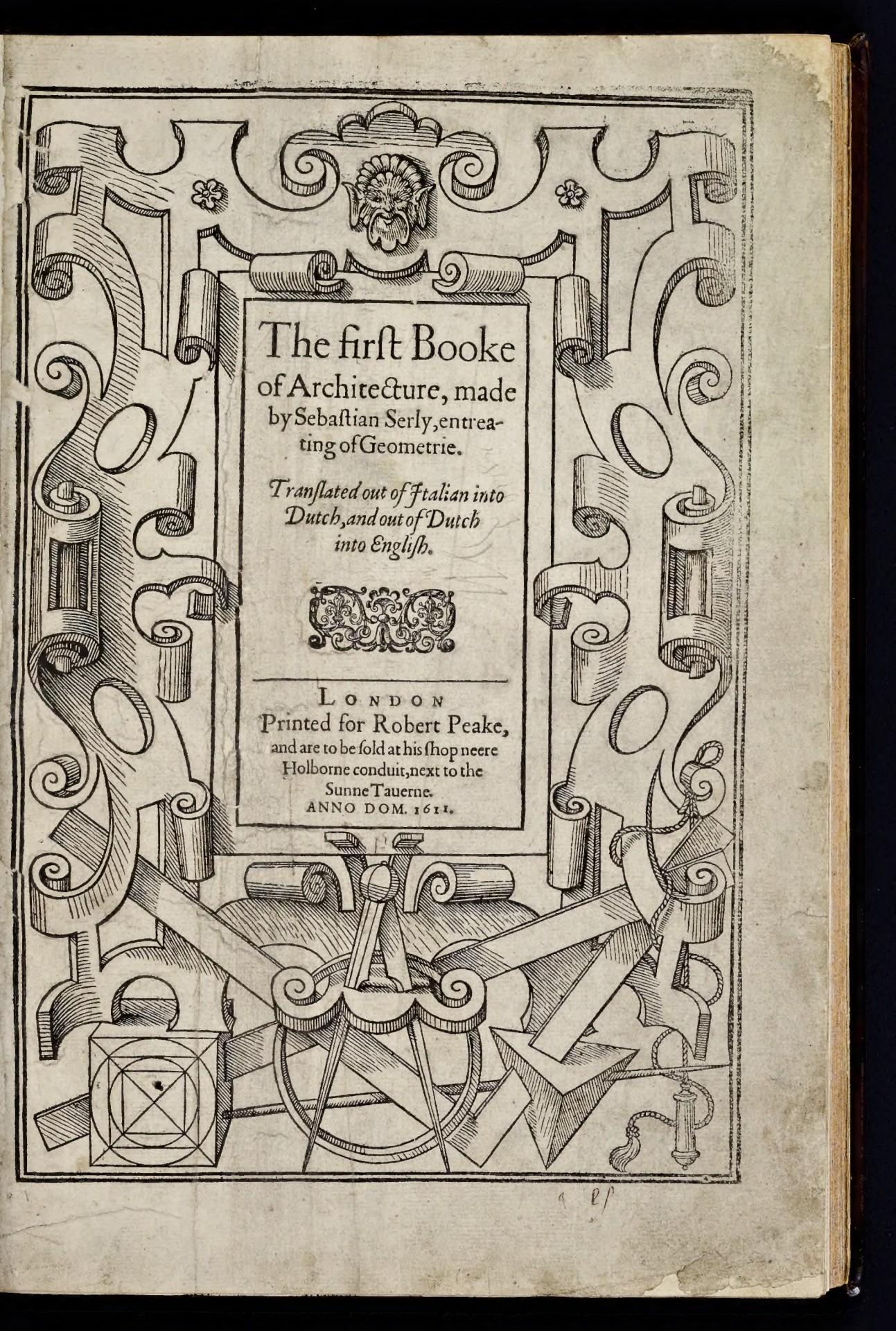
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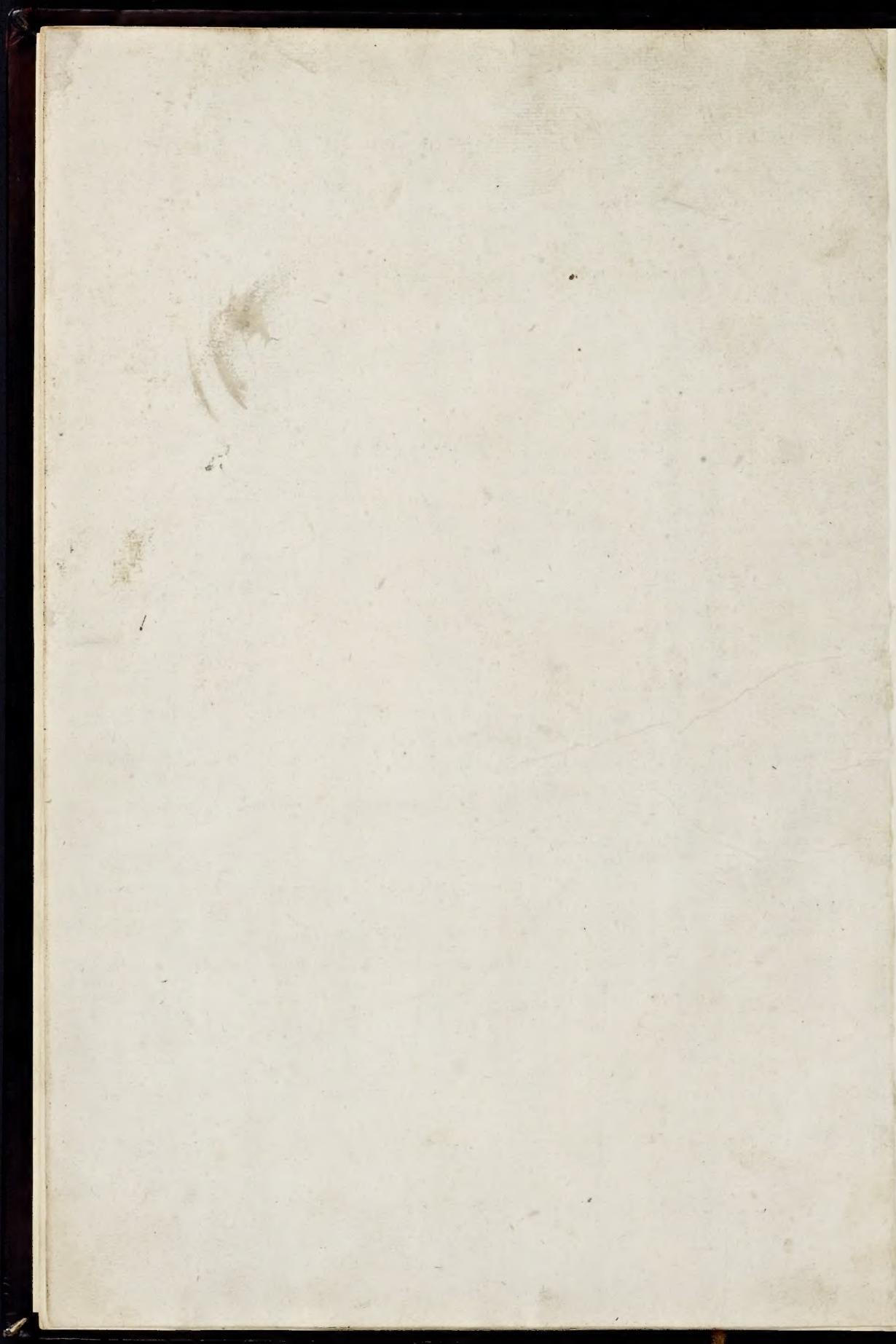


The first Booke
of Architecture, made
by Sebastian Serly, entrea-
ting of Geometrie.

*Translated out of Italian into
Dutch, and out of Dutch
into English.*



LONDON
Printed for Robert Peake,
and are to be sold at his shop neere
Holborne conduit, next to the
Sunne Tauerne.
ANNO DOM. 1611.





TO THE HIGH AND MIGHTIE PRINCE.

H E N R Y,

Prince of VVales.

SJR,



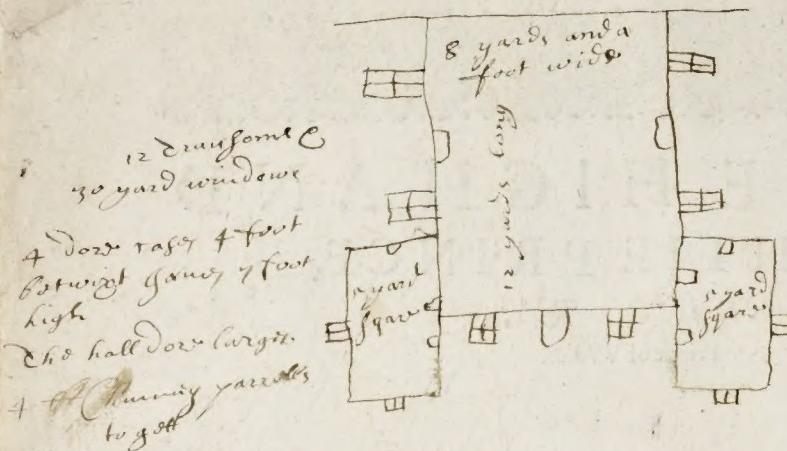
O vaine ambition of mine owne Desire, much lesse presumption of my none Deserte, incited me to present this Volume to your Princely view; but rather, the gracious Countenance, which (euen from your Childehood) you haue euer daigned to all good endeauours, invited Mee also (after so many others) to offer at the high-Altar of your Highnesse fauour, this new-Naturalized VVorke of a learned Stranger: Not with pretence of Profit to your Highnesse (who want not more exquisite Tutors in all excellent Sciences) but, vnder the Patronage of your powerfull Name, to benefite the Publicke; and conuay vnto my Countrymen (especially Architects and Artificers of all sorts) these Necessary, Certaine, and most ready Helps of Geometrie: The ignorance and want whereof, in times past (in most parts of this Kingdome) hath left vs many lame VVorkes, with shame of many VVorkemen; which, for the future, the Knowledge and vse of these Instructions shall happily preuent, if the euent but answere (in any measure) to that Hope of mine, which alone both induced this Desire and produced this Designe: VVherein I must confesse my part but small, sauing my great aduenture in the Charge, and my great Good-will to doe Good. All which, together with my best Seruices, I humbly prostrate at your Princely feete, as beseemes

Your Highnesse

most humble Seruant

Robert Peake.

M^r of Cadwne



for a facinae hearth. The heare ston 6 foot & 2 inches longe 3 foot & 2 inches broad
9 inches thick, the other two were ston 6 foot 8 inches longe & 16 inches high the next the east
foot longe & 20 inches high the west windowall ston 6 foot 8 inches longe & 20 inches high the
west windowall ston 6 foot longe & 18 inches high two stones for the two walls about
inches high apiece to make y^e walls 4 foot 2 inches high three stony for y^e bath wa
make y^e y^e same high about 4 foot longe the tynge 2 foot 6 inches longe 22 in
ches thick at head c. 10 at bottom Cimber stone 2 foot 6 inches longe 2
ches broad & 10 inches thick, two Dame stony 2 foot longe & a foot high not so high
yon thid owere bed but one y^e odg.

Samuell Stibbings
his Booke 1674



To the Louers of Architecture.

Vr learned Author Sebastian Serly, hauing great foresight to shew and ex-
plaine the common rules of Architecture, did first publish his Fourth Booke,
entreating of Architecture, and after his Third Booke, declaring excellent An-
tiquities. Fearing that if hee had begunne with Geometrie and Perspective,
common workmen would haue thought (that the two former althoough small)
had not beeene so needfull to studie and practise as the other : Which friendly
Reader, considered, hindered mee long either from Translating or Publishing the two former, being
perswaded by sundry friends and workemen, to haue desisted my purpose, both from translating or
publishing . The which I had surely effected, if I had beeene ouer-ruled by their requests and
perswasions; alleadging strong reasons, that the common Workemen of our time little regarded or
esteemed to Worke with right Simmetrie : the which is confused and erronius, in the iudgement
of the Learned Architect, if they will follow the Order of Antiquities hereafter ensuing. Where-
fore least my good meaning, together with my Labour in Transtlating and Publishing , should not
be regarded and esteemed (as worthie) considering it not onely tendeth to the great profit of the
Architect or Workeman, but also generally to all other Artificers of our Nation : I aduise all gene-
rally, not to deceiue themselves, nor to be selfe-conceited in their owne workes, but well under-
stand this my labour (tending to common good) and be perswaded that who so shall follow these
rules hereafter set downe, shall not onely haue his Worke well esteemed of the common people, but
also generally commended and applauded of all workemen, and men of iudgement. Vale.



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h () } [?] () } ^c ()

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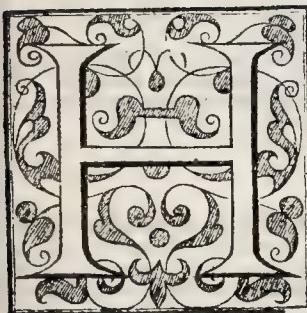
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The first Booke of Architecture,

made by Sebastian Serly, entreating of Geometrie.

The first Chapter.



¶ W^e needfull and necessary the most secret Art of Geometrie is for every Artificer and workeman, as those that for a long time haue studid and wrought without the same can sufficiently witness, who since that time haue attained vnto any knowledge of the said Arte, doe not onely laugh and smile at their owne former simplicities, but in truthe may very well acknowledge that all whatsoever had bene formerly done by them, was not worth the looking on.

Seeing then the learning of Architecture comprehen-
deth in it many notable Artes, it is necessary that the Architector or Workeman shold first, or at the least (if he can-
not attaine vnto any more) know so much thereof, as that hee may vnderstand the
principles of Geometrie, that he may not be accompted amongst the number of stone-
spoilers, who beare the name of Workmen, and scarce know how to make an answere
What a Point, Line, Plaine, or Body is, and much lesse can tell what harmonie or
correspondencie meaneth, but following after their owne minde, or other blinde con-
ductors that haue vsed to Worke without rule or reason, they make bad worke, which
is the cause of much vncertaintie or vneuen workmanship whiche is found in many places.

Therefore seeing that Geometrie is the first degree of all good Art, to the end I may
shew the Architector so much thereof, as that he may thereby be able with good skill,
to give some reason of his worke. Touching the speculations of Euclides and other
Authors, that haue written of Geometrie, I will leane them, and onely take some
flowers out of their Garden, that therewith by the shortest way that I can, I may
entreat of divers cutting through of Lines, with some demonstrations, meaning so
plainely and openly to set downe and declare the same, both in Writing and in figures,
that every man may both conceine and vnderstand them, aduertizing the Reader
not to proceed to know the second figure, before he hath well vnderstood
and found out the first, and so still proceeding, hee shall at
last attaine vnto his desire.

{ * * }

Of Geometrie

A Poynt.



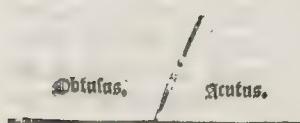
A Line.

Parable.

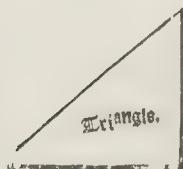
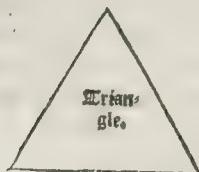
Superficies.



Perpendiculer.



Pira-
midal.



FIRS T, you must understand that a poynt is a poycke made with a Pen or Compasse, which can not bee deuided into any parts, because it containeth neither length nor breadth in it.

A Line is a right consecutive imagination in length, beginning at a poynt, and endeth also at a poynt, but it hath no breadth.

When two Lines are set or placed of a little by denesse one from the other, those two lines, according to the Latine phras, are called Parable, and by some men they are named Equidistances.

When those two Equidistances abovesayd are at each end closed together by another Line, it is then called a Superficies: and in like sort all spaces in what manner soeuer they are closed, and shut vp, are called Superficies or plainnes.

When there is a straight upright Line placed in the middle of a crose straight line, then it is called a Perpendiculer or Catheta Line: and the ends of the crose or straight Line on both sides of the Perpendiculer, are called Straight corners.

When a leaning or straight Line is placed upon a straight Line without Compasse or equaltie, as much as the same Line bendeth, so much shall the corner of the straight Line be narrower below, and the other so much broader then a right or even corner: and the straight corner in Latine is called Acutus, which signifieth sharpe, and the wider corner Obtusus, which signifieth dull.

A corner or point called Piramidal, and also Acutus in Latine, is, when two even long straight lines meet or joyn together at the upper end, as the figure right against this declareth,

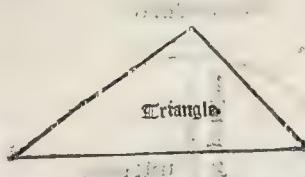
And when such a figure is closed together at the soote thereof, with a long straight line, it is then called a Triangle, because it hath three sharpe corners.

When a Triangle with two even straight lines, is closed together with a longer line then these two are, it shall have such a forme as here you see.

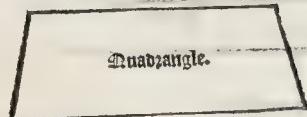
But

The first Booke. The first Chapter. Fol. 2.

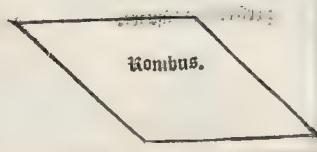
But a Triangle which is made of three unlike lines, shall also have three unlike corners.



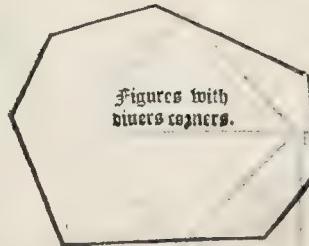
When two long and two direct downe right lines are ioyned together at the fourre corners, it is called Quadzangle with even sides or corners, but when the fourre lines are all of unlike or contrary lengths, then it is a Quadzangle of uneven sides, as this figure sheweth.



You must note that although all fourre cornerd figures may be called Quadzangles: nevertheless for that the direct fourre cornerd figures are called Quadratus: for difference from them, I will name all figures which are like unto a table, (that is longer then broad) Quadzangles.

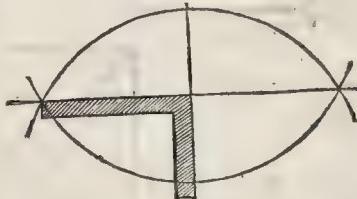


When fourre even long straight lines are toynd together at the corners, they are called Quadratus, which are fourre cornerd: when you make the two corners thereof sharpe, and the other two corners somewhat blunter, then it is called a Rombus.



Although you may turne and make all the figures aforesaid right fourre square: Yet the workman may finde other figures with divers corners. The which (as I will hereafter shew) hee may make fourre square.

Superficie of a crooked Line.



When a man with his Compasse draweth a bove, and after that draweth an other bove right against it, that is called a Superficie of crooked Lines, with two like corners: and then draweth a straight Line from the one corner to the other, and from one point or center where the Compasse stood to the other, another straight Line: Thereby you shall finde the right fourre parts thereof.

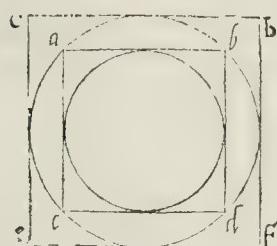
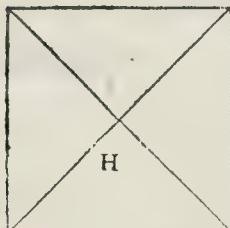
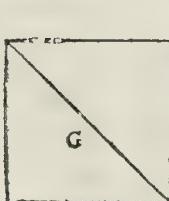
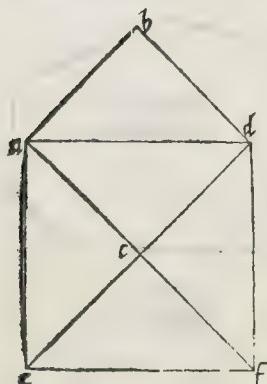
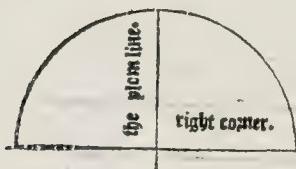


But if a man drave a whole round Line with his Compasse, that is called a full Circle, or round Superficies, and the point in the middle is called the Centre. The bottome line is called Circumferentie: and if you draw a straight line through the Center, it is called a Diameter: because it divideth the Circle in two even parts.

Then

Of Geometric

The halfe Circle.



Vhen the halfe Circumference is cut thongh the Center of the Diameter, then it is called halfe a Circle: and if you make a straight line by right in the halfe Circle, then that line maketh two even quarters of a Circle, and divideth the Diameter also into two halfe Diameters.

VVhen a man draweth four even long lines, and iorneth them together, they make a perfect corner Quadzatus: when if you draw a straight line from the one corner to the other, it is call Diagonis: because it diuideth the four corners into two even parts.

Note when a workeman hath scene a forme of some of the most necessary Superficies, hee must proceed further, and learne to augment or diminish the same, and to turne them into other formes: but yet in such sort, that they may have even parts in them.

And first, if out of the length of the Diagonis aforesaid, by the adding of these other even long lines, hee maketh another fourre square: that fourre square shall be once as great againe as the first, which is to bee understandid in this sort: That y fourre square of A. B. C. D. by the Diagonis is dividid into two Triangles, and the greater fourre square A. D. F. E. containeth fourre such Triangles: but so, that the two first fourre squares hang one within the other, therfore so, the better shewing thereof, they are here once againe set downe severally: Whereby you may see that the Quadzate G. (as I said before) containeth two Triangles, and the Quadzate H. containeth fourre such Triangles, so that the proove thereof is clearely to be scene.

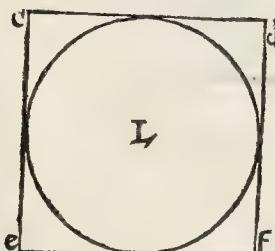
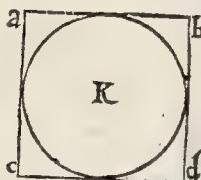
If within a fourre square you make a Circle which toucheth the fourre sides of the laid fourre square, and without the laid fourre square an other Circle which toucheth the corners marked A.B. C.D. Then the outmost Circle must bee once as great againe as the innermost: and then if about the greatest Circle you make another fourre square as C. D. E. F. then the two fourre squares must in like sort be once as great againe as the other. The proove whereof standeth hereby marked with the letters K.L. for clearer understanding of the same.

. By

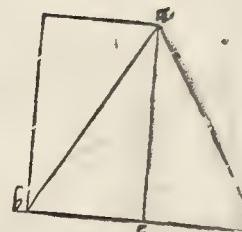
The first Booke.

By this also, the projecture or the foote of the
Bases of the Thyscane Columnes or Pillars,
and also the beth of the fundation of them under-
neath by Heronius declared, is set forth.

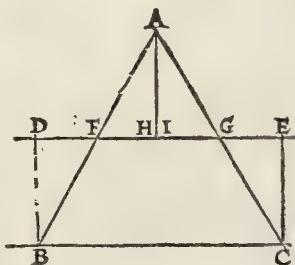
The first Chapter. Fol. 3.



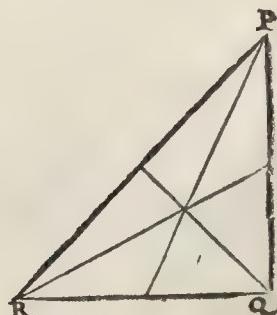
The workeman must yet proceed farther, and
learne to know how to change a Triangle in-
to a Quadzangle, and also at lat bring it to a right
Quadzangle, to the which I will set downe divers
soemes. First, take a Triangle with even cor-
ners, as A. B. C. and deuide the Base (which
is the name of all lower lines) B. C. in two even
parts, and there place the letter E. Then from the
point E. to A. drawe a line, which will deuide the
Triangle into two even parts. Then if you take
that part which is marked A. E. C. and ioyne it to
the other part, marked A. B. E. it will make a
Quadzangle, as A. D. B. E. made of a Triangle.



You may also change this Triangle in other
manner, deuiding the lines A. B. and A. C.
each in two like parts as F. and G. Then drawe
a line through D. E. as long as the Base B. C.
Then shot by the two Equidistances, corner wiser
and then the Quadzangle B. C. D. E. containeth so
much in it as the Triangle A. B. C. and the prooof
thereof is, that the two Triangles B. C. F. and
G. E. C. containe so much in them, as the two o-
ther Triangles A. F. H. and A. I. G.

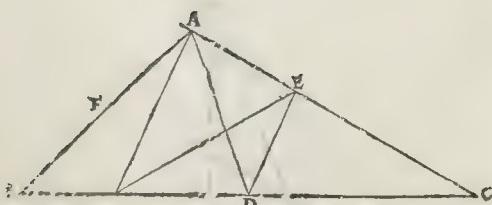
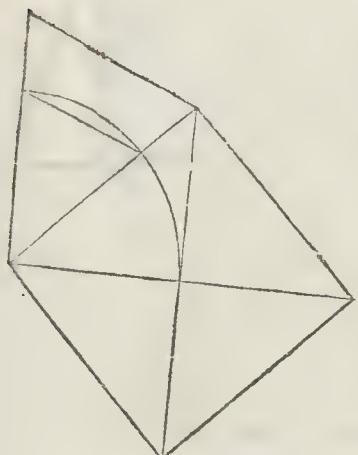
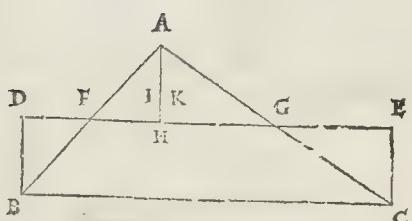
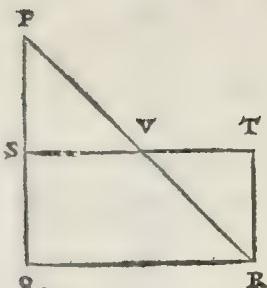


A Triangle with even points, may be deuided
thrice into two equal parts, deuiding each side
in two parts, as in the figure P. Q. R. it is seen
through the thre lines, which on either side make
two great Triangles.



Of Geometrie

THIS same Triangle P.Q.R. may thus be changed into a Quadrangle: divide the side P.Q. and the side P.R. each in two equal parts, then draw a line S.T. as long as Q. and R. and then draw a line direct downward from T.R. to close it up: and then that Quadrangle contains as much space within it as the Triangle does alway, because that the Triangle which is cut off P.S.V. is of the like greatness with the other Triangle marked V.R.T.

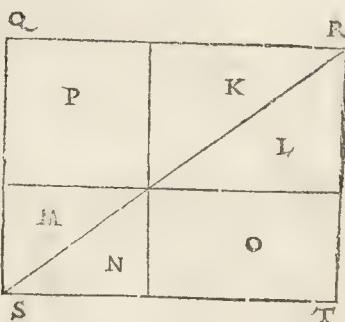
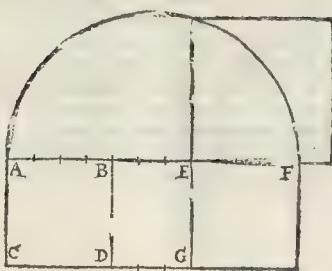


AND although there is a Triangle of unequall sides, yet a man may make it a Quadrangle, in such sort as I sayd before of the right Triangle: for although the two Triangles that are cut off, and those two that are added unto it, are not of one greatness, yet the Triangles A.F.I. and B.D.E. are one as great as the other, and againe, the Triangles A.G.K. & G.C.E. are also of one greatness: so that those that are cut off, and those that are added therunto, are of one quantitie. By these alterations aforesayd, a man may easily measure how many fute, elles or rods foursquare, are contained in a threecornered superficies.

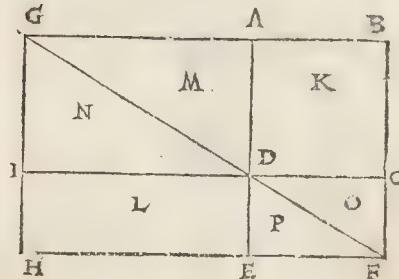
BUT it falleth out, that a Triangle (which is threecornered) superficie or plaine, must be parted crosswise in two equal parts: then out of one of the sides that you will cut through, you must make a right four square, as from the side A.B. and draw therin two Diagonals from corner to corner, which will shew you the Center C. and draw one Circle through that three corner part which you will divide, and so you shall find the two points, where you shall drawe your dividing line. He that distrusteth any proofe herero, may take each piece and alter it into a Quadrangle, and after into a Quadrilate, as hereafter shall be shewed, and he shall find it true.

AN Architecte or Surveyor must also undergoe other burtherns, for that he must know how to divide a piece of ground, that no man may be hindred thereby. As for example, if there were a piece of ground that lay like a cornered well, with onequall parts, having on the one side thereof a Well, but not in the middle: and this ground, or threecornered piece of Land is to be divided into two equal parts; in such sort, that each of them may have the use of the Well: it must be done in this manner. I make a Triangle marked A.B.C. and the Well is marked with G. Now divide the line B.C. with a darke line in the two equal parts as the letter D. sheweth, and then drawing a line from D. to A. then the Triangle is divided into two equal parts: but both of them can not yet come to the Well: then drawe another line from the Well G. to A. and from the point D. you must set an Ordinance against G.A. marked with E. & drawing from G. which is the Well: the blacke line to the letter E. it will denude the ground in two unequal parts, and each of them shall have the Well at the end of his ground, so that part A.B.G.E. containeth in it self as many fute or rods, as that part which is marked G.E.C.

I shewed before, how a man shold make a four square Superficies once as great againe as it is, but it may fall out, that a man is to make it but halfe as great againe, or more or leesse, as he thinketh good, or as occasion serurth, which the Architecto is allo to learne of necessite. Whiche to shew, I set downe a right four square thing marked A. B. C. D. which I will haue threes quarters greater: the same three quarters I set by the side thereof, so that the same with the Quadrate together make a Quadzangle A. E. C. G. To bring this Quadzangle into a right Quadrate, you must lengthen the line A. E. yet a quarter longer, or from the side of the Quadzangle E. G. and place F. there: then vpon the line A. F. make halfe a Circle: whiche line will shew you the one side of the Quadrate which you seeke for: which Quadrate being made, will containe as much in it, as the Quadzangle already mad. And in this maner you may change all Quadzangles which are long four cornered pieces of worke, into a iust and true Quadrate.



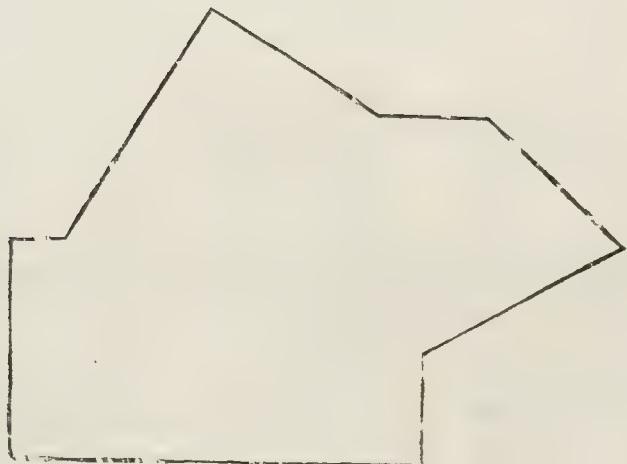
Now to prove that, which I sayd before, you must loyne the Quadzangle with the Quadrate together, in one four square superficie as Q. R. S. T. and from the corner R. to the corner S. draw a Diagonus, and it is certaine that that Diagonus will make two even parts. Now Euclides saith, that when a man taketh my even parts from even parts, the rest of the parts also remaine alike: then take the Triangle K. L. and the Triangle M. N. which are both alike: the right four cornerd superficie P. is of the same greatness, that the longer superficie O. is.



Acaine, you may easilie change a Quadrate into a Quadzangle, as long as narrow as you desire to have it, Res-
ting thus: Take your Quadrate A. B. C. D. and lengthen your line A. B. and the line B. C. Which on it then
set the length of the Quadzangle, whiche you desire to haue vpon the line A. G. Then from the point G. draw a line as
long by the corner of the Quadzangle D. to the line C. b. and there you finde the shortest line of the Quadzangle: and
so to the contrary you shall by the least side of the Quadzangle haue the longe: Also, as you may also prove by the fore-
sayd Figure: for when you take away the Triangles M. N. and O. P. which are both alike, then the two parts which
are K. L. are also alike.

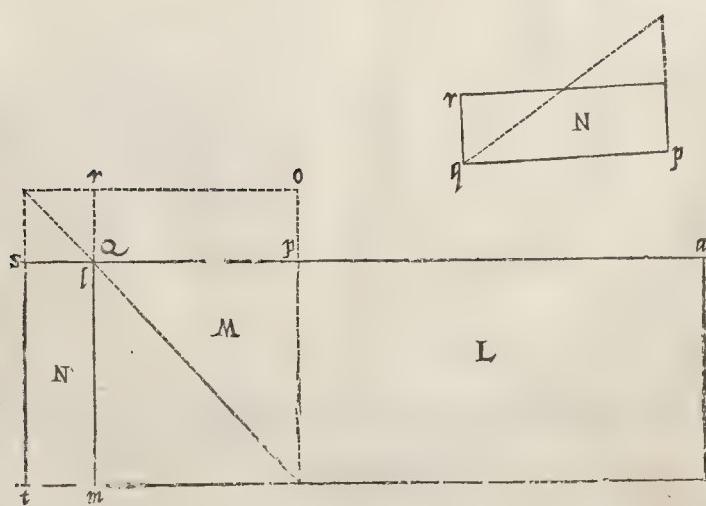
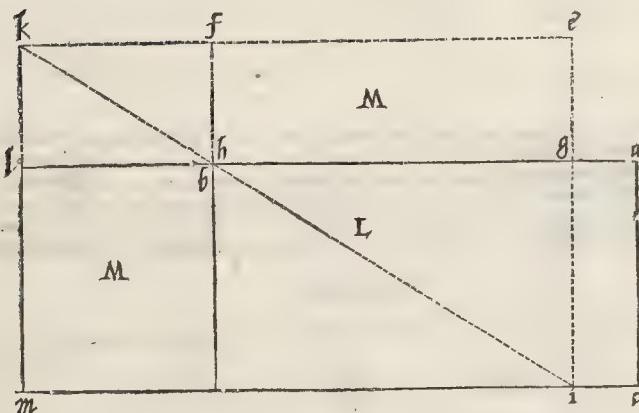
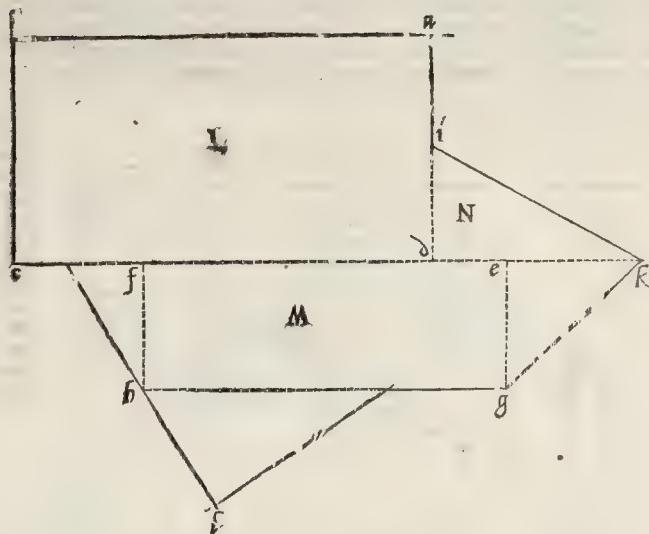
Of Geometric

An Architect or Surveyor may by chance have a piece of worke of divers unequall sides come to his hands, which he is to put into a Longzangular or Quadrat forme, to know what it containeth, and specially when it belongeth to more than one man, whether it bee Land or any other thing. For although the Architect or Surveyor of Land could not skill of Arithmatike or Ciphering: yet this rule cannot fail him, nor any other man that desreth to find out the deceite of a Taylor. Thus, I say then, let it bee what forme soever it will, I set downe this hereafter following. First then, seeke the greatest Quadzangle or Quadzangle, that you can take out of it: that done, seeke yet another Quadzangle or Quadzangle, as big as you can take out of it, out of the rest of the said worke: and if you can after that make more Quadzangles out of it, I meane all with right corners, take them out also: but if you can find no more in it, then make Triangles also as big as you can, of which Triangles (as you are taught before) you may make Quadzangles, and let every piece severally be marked with Characters, as in the figure following may be seen.



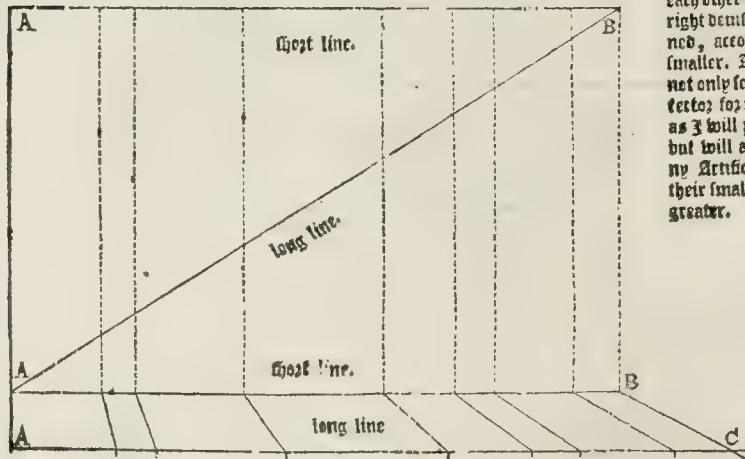
Let by example your many cornerd figures first bee marked with the greatest Quadzangle with these letters A, B, C, D, and then with a lesse Quadzangle, as E, F, G, H, the rest are all Triangles. Now set the greatest Quadzangle L in a place by it selfe, and then the other marked with M. which set upon it, that the two corners or sides may be alike: which done, lengthen the line E, F, and the line E, G, and where they lay or lanch under the great Quadzangle L. here set an I, from this I. a Diagonall line, being drawn through the corners B, H, the same line shall be haluen to the point: that, by the shunting of the Characters B, M, L, D, will shew you another Quadzangle, of the like quantite that the Quadzangle M. is: so that the whole Quadzangle D, C, L, M. containeth the two aforesayd Quadzangles. Touching the Triangles, when you haue changed the same (according to your former instruction) into Quadzangles, as you may see by the Triangle N, so may you put that Quadzangle also in the greatest Quadzangles (or lesse trouble.) The great Quadzangle A, L, M, C. is once againe placed aboue with the small Quadzangle O, P, Q, R. set upon it, and the Diagonall line is placed behinde the greater (which is L, M, T, S. both marked with N. set in the Quadzangle A, C, S, T. containeth thre Quadzangles L, M, N, and as many moze as there are; you may in this sort bring them all in one Quadzangle: if there falleth out any crooked lines, the skillfull Architect or Surveyor man almost bring them into a square, and those Quadzangles, if need be, may also be reduced into perfect square Figures, as aforesayd.

The first Booke. The first Chapter. Fol. 6.

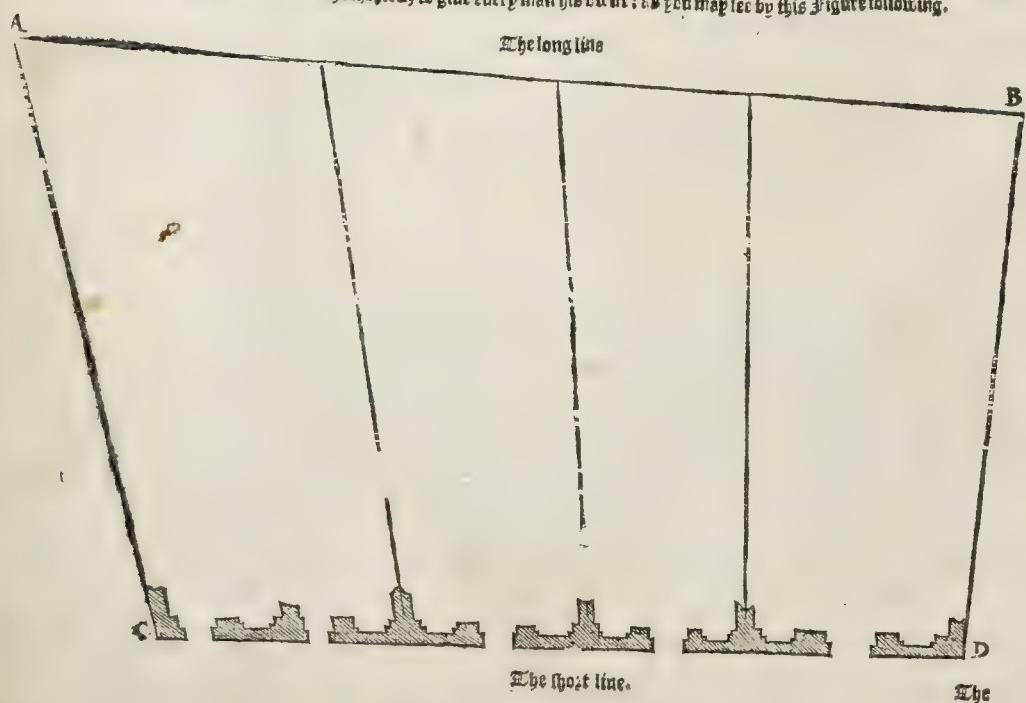


Of Geometrie

WHEN a man hath a line or other thinge of unequall parts, and there is also another longer line, or some other thinge, by whiche a man would also deuide into unequall parts, according to the proportion of the shorter line, then let the shortest line be A. B. and the greatest line A. C. now it is necessary that from the uppermost point A. you should make a corner as A. B. and A. A. Then take your longer line, and set it with the end C. vpon B. and let the other end rest at the hanging line A. A. then from every point of the uppermost line A. B. let a hanging line fall vpon the line A. C. so that they may be equidistant with the line A. A. & where y^e said lines cut through each other, there is the right denisition proportioned, according to the smaller. This rule shal not only serue the Architectes for many things, as I will partly shewe: but will also serue many Artificiers to reduce their small workes into greater.

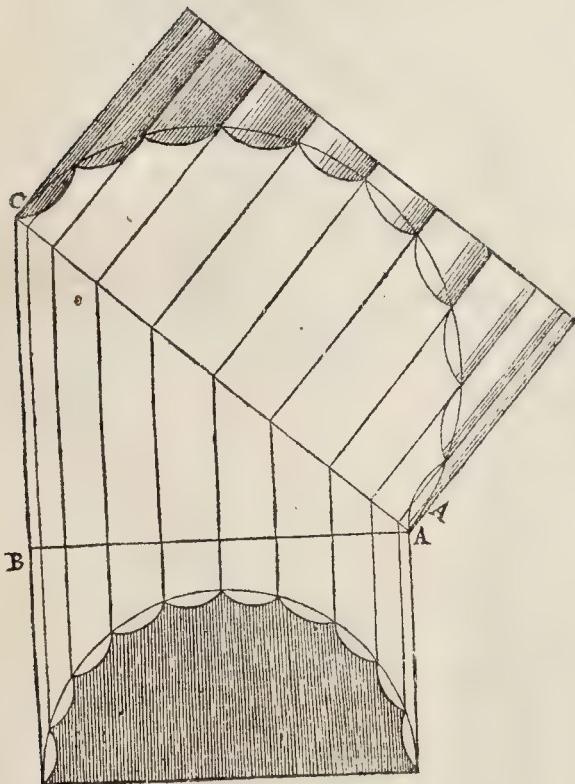
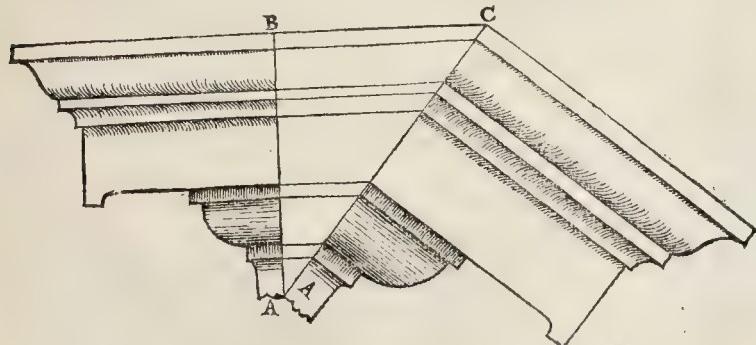


For example of the figure abovesaid, I suppose. Houses or pieces of Land to be of divers widenesse, which should be narrower before then behinde. Which houses, by fire or water are so decayed, that in the sorpart betweens C. D. there were but some signes of division to bee seene of the houses, and behind the houses betweens A. and B. no signes at all to be seene. Now as the misfortune was past, and that every man desired to have his part of his inheritance, then the Architector, as an empire, according to the rule abovesaid, should deuide the longest line according to the proportion of the shorte, to give every man his due: as you may see by this Figure following.



The first Booke. The first Chapter. [Fol. 5.]

THE Architecte must have a small proportioned Cornice, which if he would make greater, keeping the same proportion, hee may doe it as he is formerly taught, as in this Figure following is shewed by the short line marked A. B. and the longer line marked A. C.

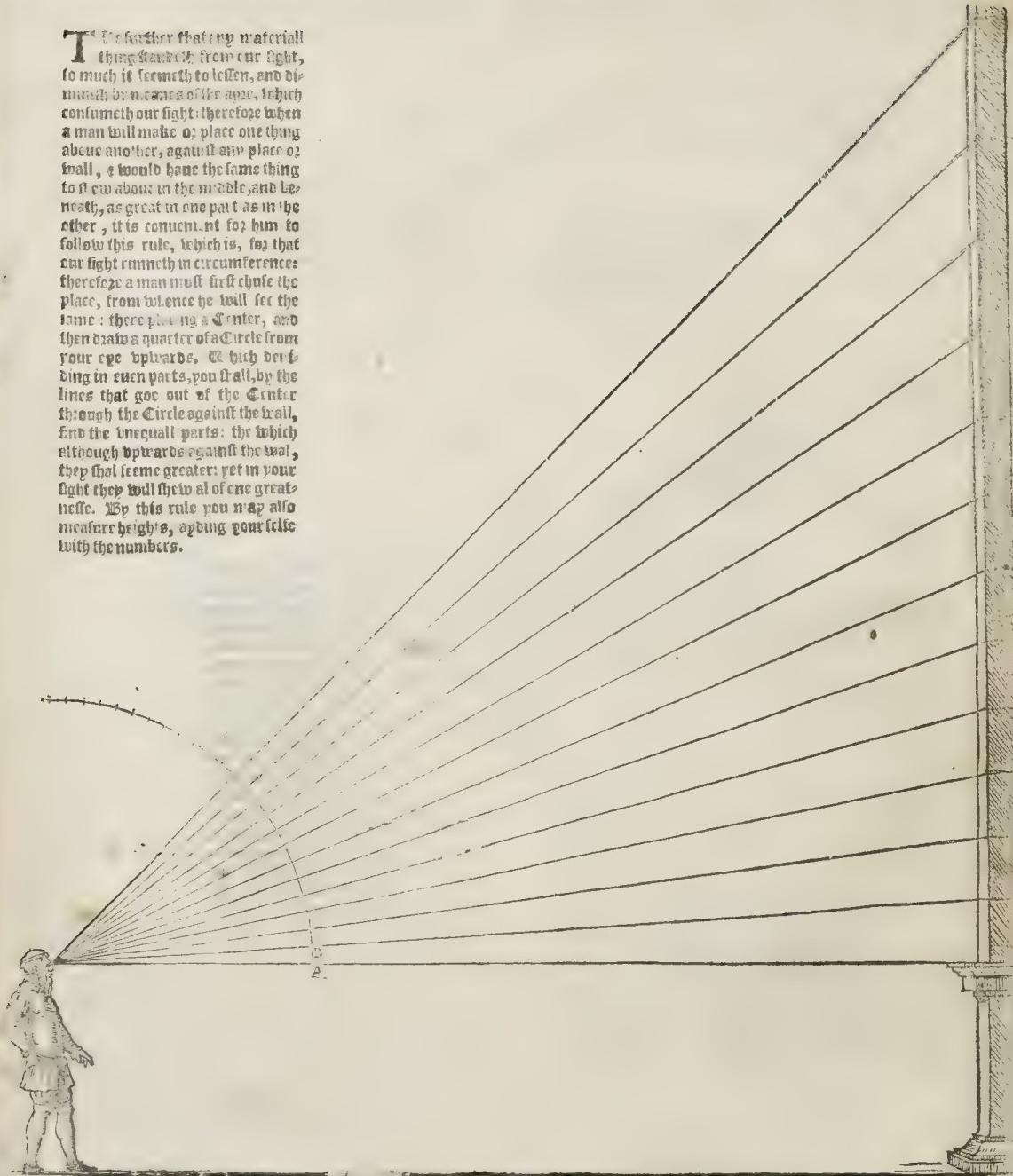


AP Architectes; or workman, must likewise learne to augment & make greater a hollowe coloume, which hee may also doe by the two lines aforesayde, and although the Columnbe should be a Donica (yet it is to bee understood of all kinds of Columnes. This rule wil also serue (not onely for the three figures set downe) but also for as many, as if I shoulde shewe them, it would containe a whole booke of them alone, and therefore this shall suffice at this tyme for the workeman.

The

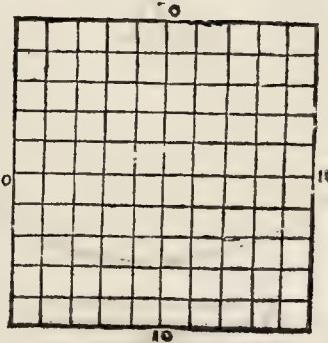
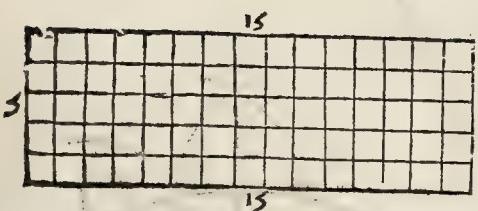
Of Geometricie

The further that thy materiall thing standeth from our sight, so much it seemeth to lessen, and diminish by reason of the ayre, which consumeth our sight: therefore when a man will make or place one thing above another, against any place or wall, he would have the same thing to shew about in the middle, and beneath, as great in one part as in the other, it is conuenient for him to follow this rule, which is, for that our sight runneth in circumference: therfore a man must first chuse the place, from whence he will see the same: there placing a Center, and then draw a quarter of a Circle from your eye upwards. Which divid-
ing in even parts, you shall by the lines that goe out of the Center through the Circle against the wall, find the unequal parts: the which although upwards against the wal, they shal seeme greater: yet in your sight they will shew al of one greatness. By this rule you may also measure heights, syding yow selfe with the numbers.

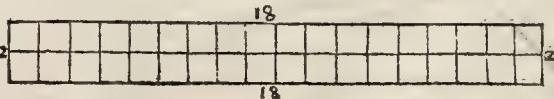
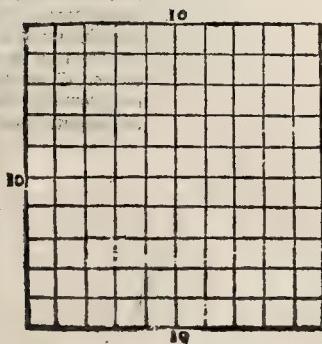


The first Booke. The first Chapter. Fol. 7.

Many men are of opinion, that straight lines, in what manner soever they are closed, containe as many spaces one way as another, (that is to say) if a man had a cord of forty fote long, and shold lay it diuersly in a round, thicke cornerd, fourre square, or fine cornerd for me: but the superficies are not of ones selfe same space, which may be seen by these fourre square figures following; for the first line holdeth on either side ten, which is forty: and the space containeth ten times ten, which is an hundred. The other line upon the two longest sides containeth fiftene spaces, and on the shortest sides five, making forty also: but five times fiftene make but seuentie and fift.

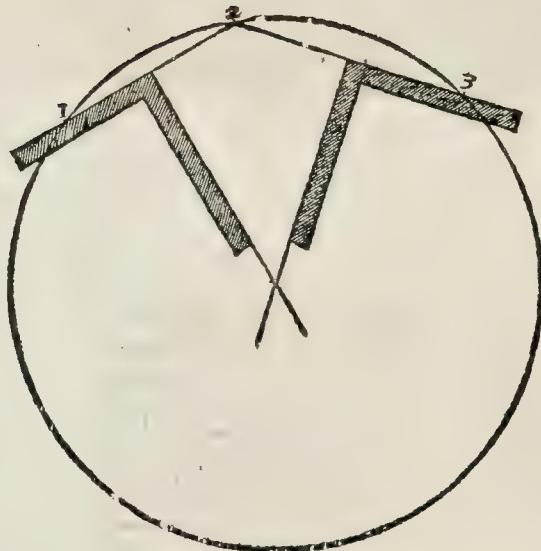


If the Quadrate stretcheth further out, so that the two longer sides were eightene a piece, then the shorter sides must each have the to have forty upon the line, but the space shoulde containe but fiftie and thirty. And hereby you see what a perfect forme may doe against an imperfect. And this rule the wozkeman shall use, that he may not be deceyued when he will change one forme into another.

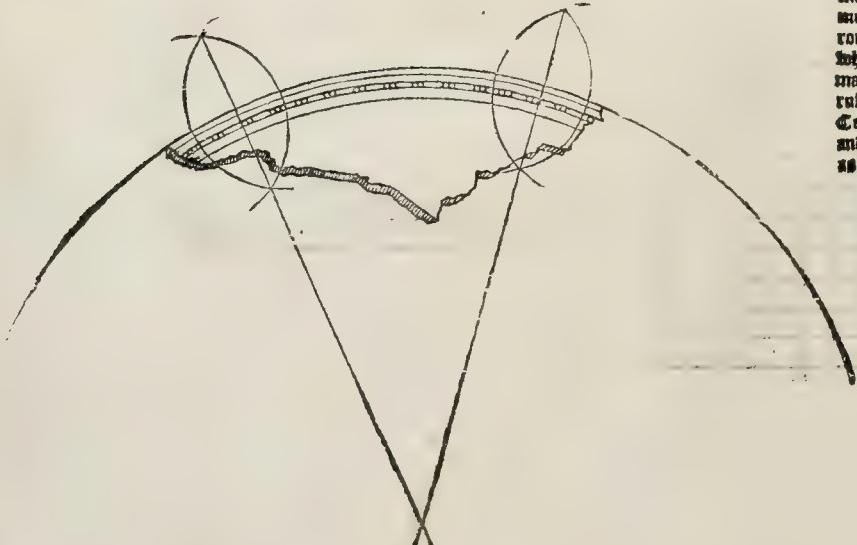
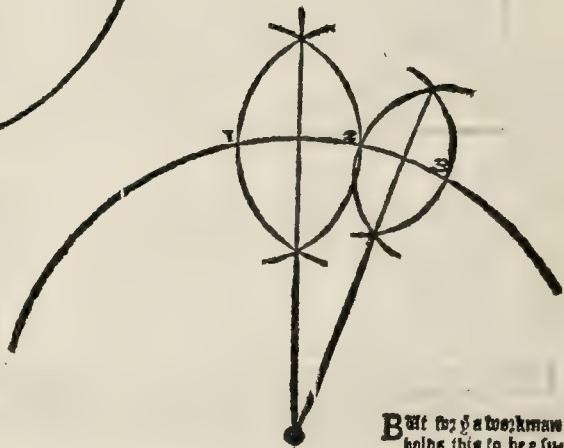


Of Geometricie

If a man should make thre points (which shold not stand upon a right line) and desiring to have a circumference made, the compasse must passe along vpō each of these points. To doe it from the point one, to the point two, hee must draw a line, and from the point two, to the point three another: which two lines shall each of them be devided into two equall parts, and setting the squars halfe way in them, as passes it in the figure, by that croſſe it will ſhew you the Center, wherein you must ſet one ſide of the Compasse, and with the other draw the Circle through all the ſayd thre points.

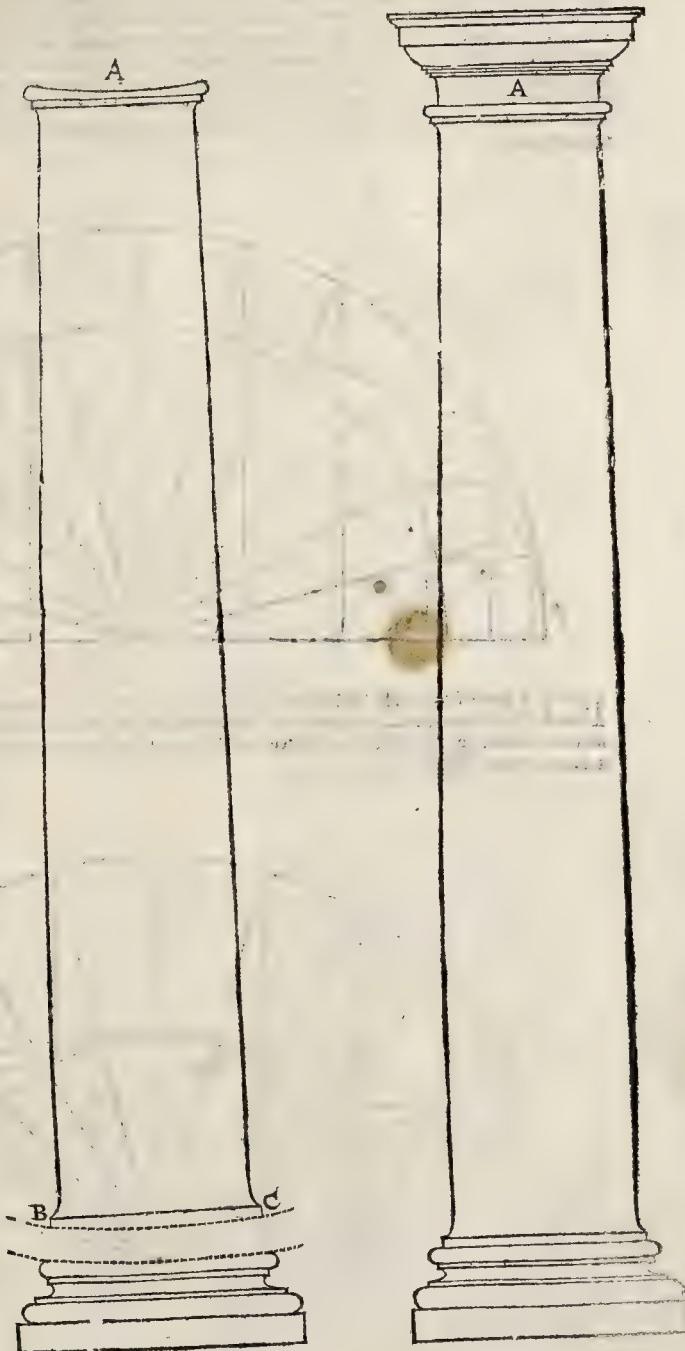


You may find the Center of thre points another way, without your Compasse, making a two corner superficie from the one point to the other, through the whiche Corners two ſtraight lines being drawne long enough downwards where they croſſe one ouer the other, they will ſhew you the Center of the thre points.



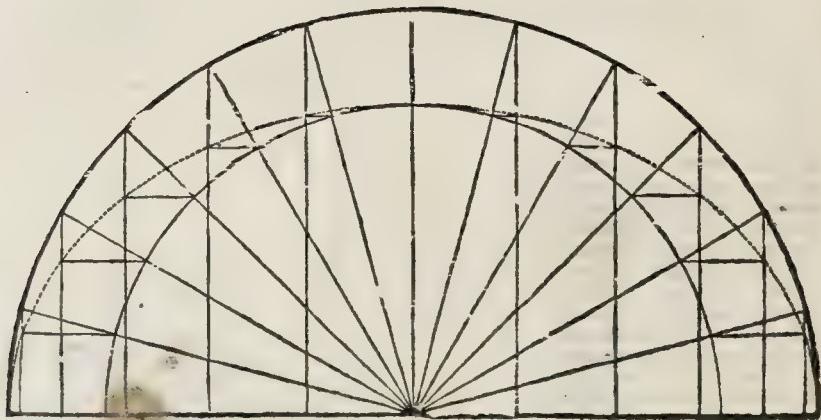
But for a workman holds this to be a ſuperfluous ſpeche, and a thing of no moment, it may be that a workman may haue a piece of a round worke to doe, whiche he is to perfitt and make full round, by this rule hee may finde the Center, Circumference, and Diameter thereto, as the figure sheweth.

We finde in Antiquities; and also in moderne works, many Pillars or Columnes, which beneath in the ioynts at the Basies are broken asunder, which is, because their Basies were not well made according to their corners: or else, because they are not rightly placed: so that they haue more weightes upon them on the one side, then on the other, whereby the Cantons breake, which the wozheman by knowledges of the lines, and helpe of Geometrie, may prevente this maner: That is, Hee must make the Pillar round underneath, and his Base hollow inward: so that when you place the Pillar by the Lead, it may presently settle it selfe without any hurt. To finde this roundnes, you must set the one poynct of the Compasse upon the highest part of the Pillar that is vnder the A. and the other poynct thereof vpon B. and then drawe, or winde it about to C. and that shall bee the roundnesse, making the hollowing of the Base, according to the same measure: you may doe the like with the Capitall, as you see in the Pillar by it.

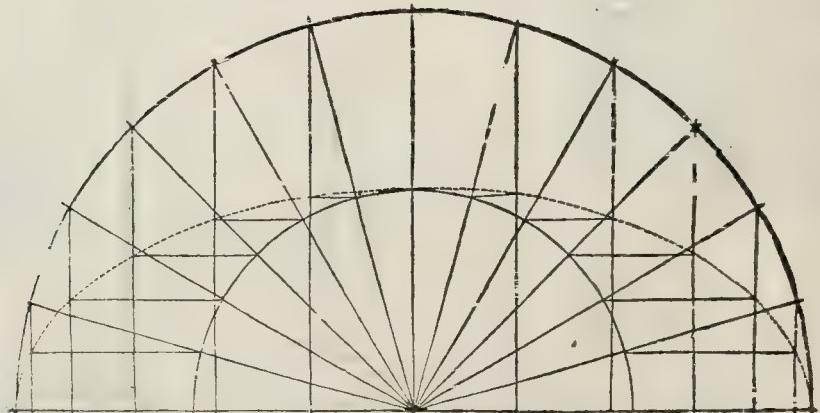


Of Geometric

If a woxkeman will make a Bowze, or any other round Arched piece of worke, which is wider then a halfe Circle, although Masons practise this with their lines, whereby they make such kindes of workes, which shew well to mens sight, yet if the woxkeman will follow the right Theoreme and reason therof, hee must ordene the order heretofore shewed. When he hath the wydeness of the height, then he must make halfe a Circle out of the middle: after that, vpon the same Centre, hee must make another lesser Circle, which must be no greater then he will make the height of the Bowze or Arche: then he must divide the greatest Circle in equal parts, which must al be drawn with lines to the Centre: then you must hang out other Perpendiculares vpon your Lead: and where the lines that go to the Centre cut th:ough the lesser Circle, from thence you must draw the crosse lines toward the Perpendicular, and where they close together, there the Bowze or Arche which is made, shall be closed: as by the points or pickes hereunder is shewed.

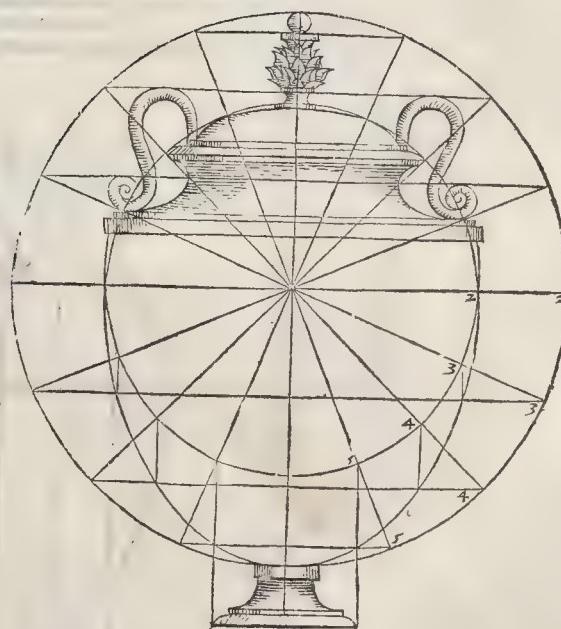
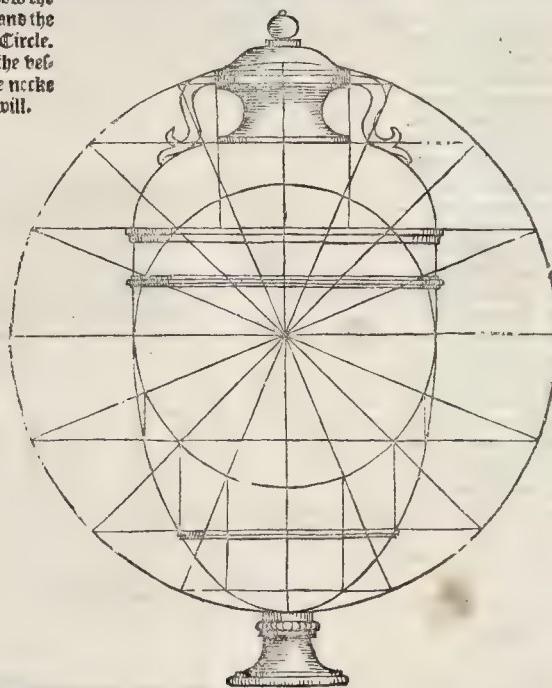


BUT if you desire to make the Bow or Arch lower, then you must follow the rule aforesaid, and make the innermost Circle so much less, which is to bee understood, that the more parts that you make of the greater Circle, so much the easier you shall drawe the crooked lines which you would haue: from this rule there are many others obserued, as you rearester you shall see.



The first Booke. The first Chapter. Fol. 9.

Calling the former rule to minde, I devised the manner how to forme and fashion divers kindes of vessells by the same, and I thinke it not amisse to set downe some of them: This onely is to bee marked, that as inde as you will make the vessells within, so great you must make the innermost Circle. The rest, the skilfull wozkeman may marke by the figures, that is, how the lines are drawne to the Center, and the Parables, and out of the small Circle. The Perpendiculars hanging, the vessells are formeit: the foote and the necke may be made as the wozkeman will.

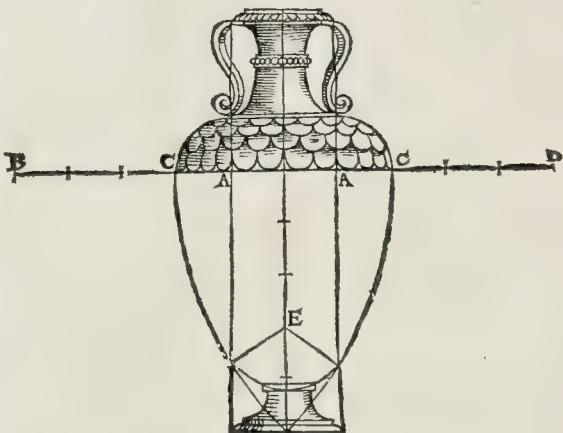


BUT if you will make the body of the vessell thicker, then you must make the halfe Circle so much the greater, and make the belly hanging downe wider it, to touch the great Circle, by the falling of the Perpendiculares vpon the crosse line, as by these Figures 3 4 5. it is shewed: Whereby a man by this meane may make divers vessells, differing from mine. The necks and couers of these vessells are within the small Circles: the other members and ornaments are alwayes to bee made, according to the wil of the ingenious wozkman.

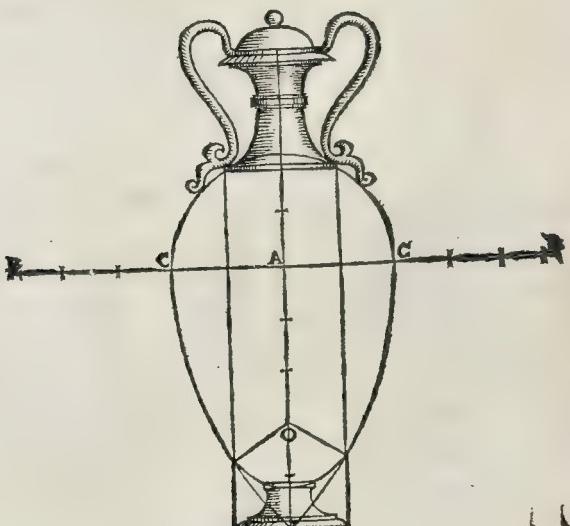
Of Geometrie

IT is an excellent thing for a man to study or practise to do any thing with the Compasse, whereby in time men may find out that is hid they never imagined: as this night it happened unto me, for that seeking to find a nearer rule, to make the forme of an Egge, then Albertus Durens hath set downe: I found this way to make an Antieke vessel, placing the sorte beneath at the soule of an Egge, and the necke with the handles above upon the thickest part of the Egge. But first, you must forme the Egge in this manner: Make a straight croesse of two lines, and divide your croisse line in ten equal parts: that is, on each side five.

Then, set the Compasse vpon the Center A, and with the other foote thereof, draw in two parts, that is, to C, making halfe a Circle upwards. That done, set one foote of the Compasse vpon the point marked B, and with the other draw in the outermost point C, drawing a piece of a Circle downwards toward the Perpendicular, and doing the like on the other side, you must make a point below. Then take the halfe of the halfe Circle above that two parts, and place it at the undermost point of the Perpendicular upwards above O, where the Centre to close the Egge, shall stand: the rest under shall be for the foot: the necke, without doubt, may be made two parts high, and the rest according to the workmans pleasure, or according to the figure herunder set downe.



YOU may also make another forme of a Cup or vessell, after the rule aforesayd. But from the point A, (which doeth shew the breadth of the sole, and the widenesse of the mouth) you must make your Circle upwards, from C, unto the two Perpendiculares, where the body shall be closed vp. The necke standing above it, shall be two parts high: but the rest of the workmanship shall be made according to the will and devise of the workman.



By this meane you may make other different kinde of Cups or vessells: but these that followe, you must make in this sort: you must divide your croſſe line in twelve parts through the point A, making two Perpendiculares to shew the ſoothe and the necke: then ſetting one ſoote of the Compale upon B, and the other ſoote upon I, drawing a pieſe of a Circle downe-wards, towards the Perpendicular: and the like being done on the other ſide to the Figure of 2, then place your Compale upon the point C, and touching the floes 3. and 4, then the bottom of the vefell will be closed by: then place the Compale upon the point between I. and A, and it will bee the roundneſſe of the vefell above: the other ſoure parts ſerue for the necke of the vefell, with the reſt of the worke.

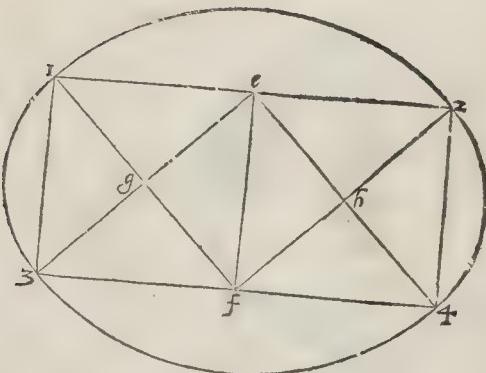
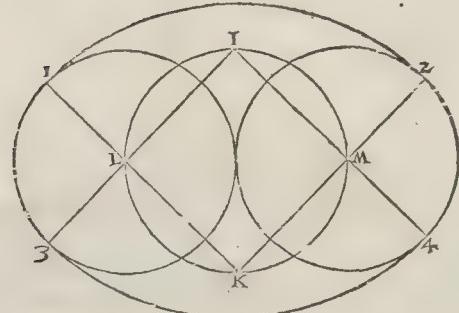
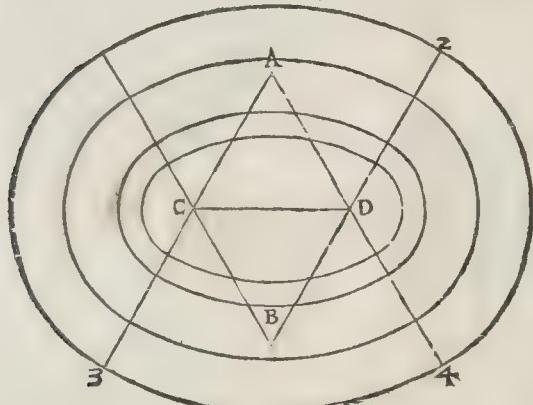


A man may make a vefell onely by a Circuler forme, making therein a Circuler croſſe, and dividing every line into ſix parts: the halfe circle ſhall be the belly of the vefell, and a ſixt part upward for a Fréſe, that there may be more place to beautifie it: an other part ſhall be the height of the necke, and another part the couer: and for the ſoothe, although it be but a halfe part high, it may well goe a ſixt part without the round: and althoſh I haue ſet downe but ſixt manner of cups or vefells, yet according to the rule aforesayd, a man may make an infinite number of vefells, and a man may alter them by their D̄naments, wherof I ſay nothing, that you may ſee the line the better.



Of Geometrie

A Man may make Duale forme in diuers fashions, but I will only set downe soure. To make this first figure, you must set two perfect Triangles one above the other, like a Rombus, and at the ioyning of them together, you must draw the lines through to 1. 2. 3. 4. and the corners A. B. C. D. shall be the fourre Centers, then set the Compasse upon B. and the other upon I. and draw a line from thence to the figure 2. After that, from the point A. and 3. to 4. you must also draw a line: which being done, set the one end of the Compasse in the point C. and then draw a piece of a Circle from 1. to 3. and againe, the Compasse being in the Center D. draw a piece of a Circle from 2. to 4: and then the forme is made. You must also understand, that the nearer that the figures come to their Centers, so much the longer they are: and to the contrary, the further that they are from their Centers, the rounder they are: yet they are no perfect Circles, because they haue more then one Center.

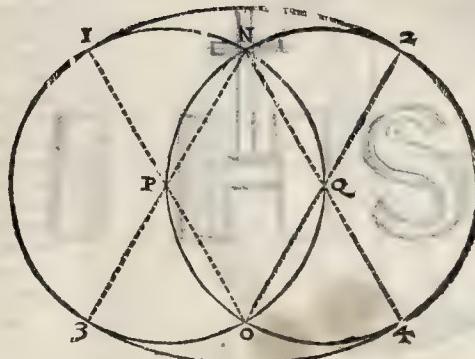


FOR the making of the second Duale, you must first make thys Circles, as you sawre drawing, where hysse straignt lines stand: the fourre Centers shalbe I.K.L.M. Then placing one point of the Compasse in K. you must drawe a line with the other point from the figure 1. to 2. Againe, without altering the Compasse, you shal set the one end of the Compasse in L. and so drawe a piece of a Circle from the figure 3. to the figure 4. and that maketh the Composite of the Circle. This Figure is very like the forme of an Egge.

THIS third forme is made by two fourre cornerd squares, drawing Diagonen lines in them, whiche shal shew the two Centers G. H. and the other two the corners E. & F. Then draw a piece of a Circle fro F. to the figure 1. and so to 2. Do the like from E. to 3. and 4. which done, from the points G. and H. make the two sides from 1. to 3. and from 2. to 4. and so shew vp the Duale.

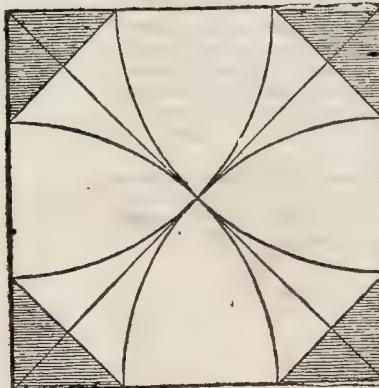
If you will make this fourth Duale; then make two Circles that may cut through each others Center, & the other two Centers for the closing of the Circle be N.O. after that, whether you draw the right lines or not from the points O. N. you shall shut up the sides from 1. and 2. and from 3. to 4.

And although our Author sayth, there are four forme of Duales: yet this last figure is of the same forme as the first, only this is easier to make.

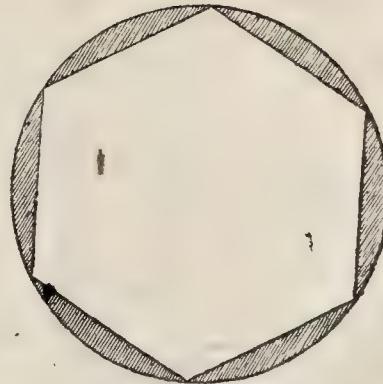


Touching the Circles, there are many figures which are round, and yet some have 5, 6, 7, 8, 9, and 10. corners, &c. But at this time, I will speake only of these three principally: because they are most common.

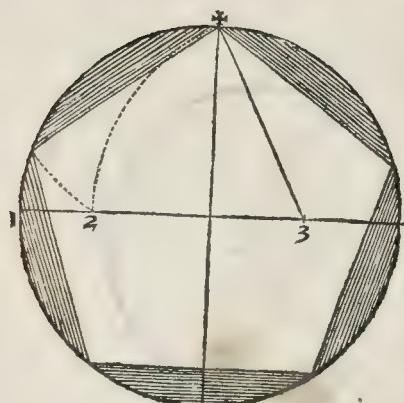
This Octogonus, or eight points, is drawn: Then out of a right four cornered square, drawing the Diagonals which will shewe you the Center: then set one foot of your Compas upon the corners of the Quadrat, and leading the other foot through the Center, directing your Circle toward the side of the Quadrat, there your right pointes shall stand to make it eight cornerd: and althoough a man might only doe it by the Circle, making across therewin, and deviding each quarter in two, yet it will not be so well, and therefore this is a surer and more perfect way.



This Hexagonis, that is, the six cornerd Circle, is easiest made in a Circle: for when the Circle is made, you may devide the Circumference in six parts equally, without stirring the Compasse, and drawing the line from one point to another, the six cornerd arcs made.

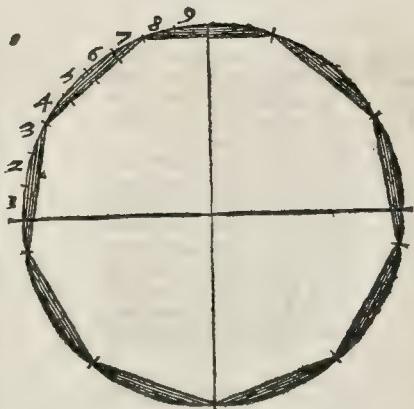
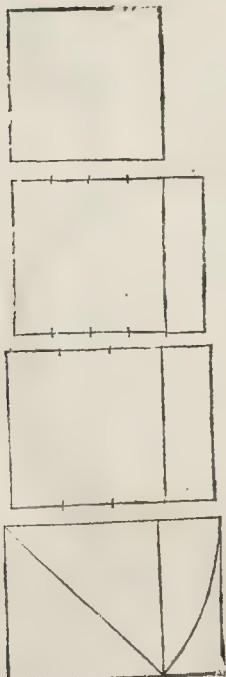


Of Geometrie



BECAUSE the Pentagonus that is fve cornered, is not so easilly to be made as the others are, because it is of an uneven number of corners, notwithstanding you may make it in this manner: When the Circle is made, then make a straight croffe therin: then bende the one halfe of the croffe line in two parts, which is marked with the figure 2, then place the one foote of the Compasse upon 2, and with the other, placing it vnder the croffe, drawe downe-ward to the croffe line marked 2, from thence also from vnder the croffe, you shall finde the length of every side of the Pentagonal. In this figure also you shall finde the Decagonal, that is, ten corners: for, from the Center to the figure 2, that shall be one side thereof, you may also make a sixte cornered figure out of this indenesse 1. 2, and place a Particular line vpon the point 3. And Albertus Durens saith, that the same also will serue to make a seuen cornered figure.

THIS figure will serue such men as are to part a Circle circumference into unequall parts, how many soever they bee: but not to bring the Reader into confusidnesse, with making of many forme, I will onely set downe this diuided into nine corners, which shall serue for an example of all the rest, which is thus: Take the quarter of the Circle, and diuide it into nine parts, and foure of these parts will bee the ninth part of the whole Circumference: you must also understand the same so, if you devide a Quadrant into eleven, twelve, or thirkene parts, &c. so that alwaies foure of these parts bee the iuli hydrenesse of your parts required.



THERE are many Quadzangle propo-
sitions, but I will here set downe but seuen
of the principallest of them, which shall
serue for the use of the workeman.

FIRST, this forme is called a right four
cornered Quadzale.

THE second forme or figure in Latine, is
called **S**equiquarta, that is, which is
made of a four cornered Quadzale, and an
eighth part thereof tyned unto it.

THE third figure in Latine, is called a
Sexquiteria, that is, made of a fours
squared Quadzale, and a thirde part therof
tyned unto it.

THE fourth, is called **D**iagona, of the
Line Diagona: which line divideth the
four square Quadzale croffe through the
middle, which Diagonall line being
toucht from vnder to the end thereof up-
wards with the Compasse, and so drawen,
will shew you the length of the Diagonall
Quadzangle: but from this proportion
there can bee no rule in number well set
downe.

The

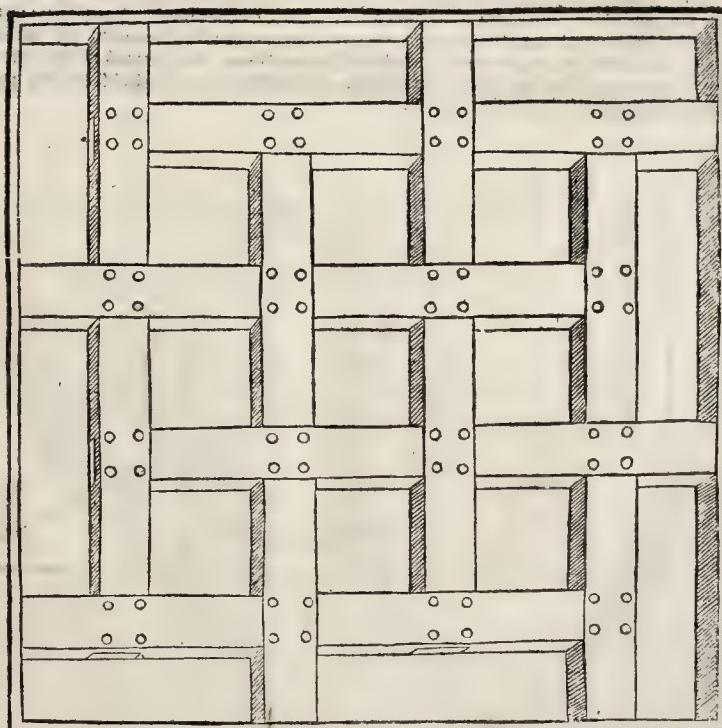
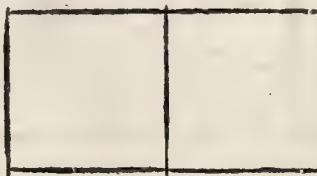
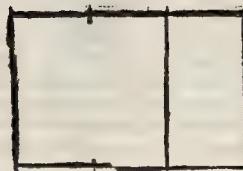
The first figure is called a **Hesquial-**
ters, that is, a four square, and halfe
of one of the four squares added vnto
to it.

Sicut in figura 11.

The first is called **Superbisenfiercia**,
that is, a four square, and two third
parts of one of the four squares ad-
ded thereto.

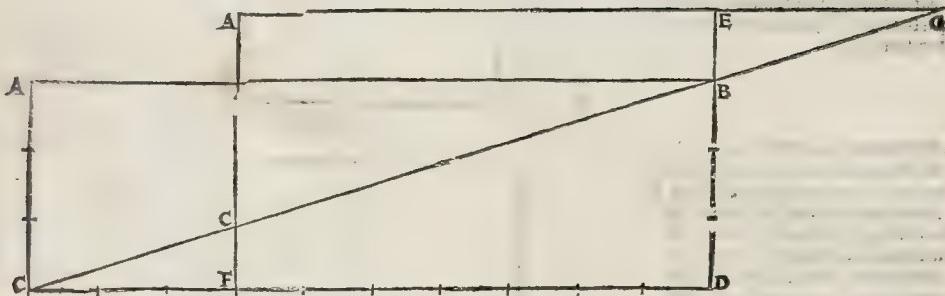
The seventh and last figure, is cal-
led **Dupla**, that is, double: for it is
made of two four square forms
joined together: and we finde not in
any Antiquities, any form, that passeþ the
two four squares, unlesse it bee in Gallic-
ties, Entries and other so walke in, and
some gates, dores, and windows haue
been in their heights: but such as are wile
will not passe such lengths in Chambers
or Wallies.

Many accidents
like unto this,
may fall into hys
man's hand, which is,
that a man shold lay
a feling of a house in
a place which is six-
feete foote long, and
as many foote broad,
& the rafter shold
be but fourteene
foote long, and no
more wood to be had:
then in such case, the
building thereof must
be made in such sort
as you see it here set
downe, that the raf-
ters may serue, and
this will also bee
strong enough.

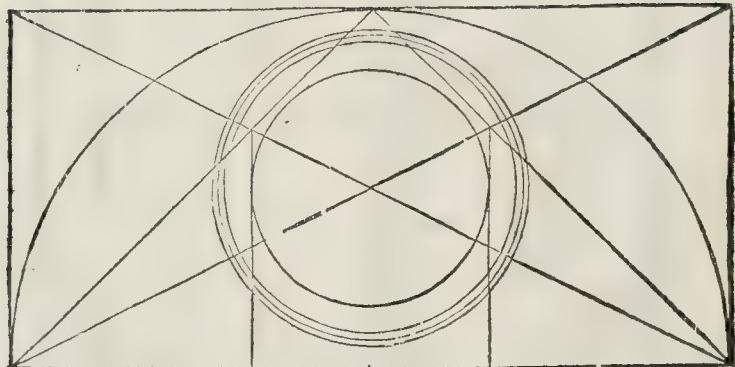


Of Geometrie.

IT may also fall out, that a man shal finde a Table of ten foote long, and thre foote broade: with this Table a man would make a doore of seuen foote high, and fourfe foote wide. Note to doe it, a man would saw the Table long wise in two parts, and setting them one tyder another, and so they wold be but fourfe foote high, and it shold be seuen: and againe, if they wold cut it thre foote shorter, and so make it fourfe foote broade, then the one doore shall be to much pased. Therefore he must doe it in this sort: Take the Table of ten foote long, and thre foote broad, & marke it with A. B. C. D. then sawe it Diagonall wise, that is, from the corner C. to B. with two equall parts, then sawe the one pase thereof thre foote backwards towards the corner B. then the line A. F. shall be fourfe foote broad, and so shall the line E. D. also hold fourfe foote broad: by this meanes you shall haue your doore A. F. F. D. seuen foote long, and fourfe foote broade, and you shall yet haue the thre cornerd pieces marked E. D. G. and C. F. and C, left for some other use.

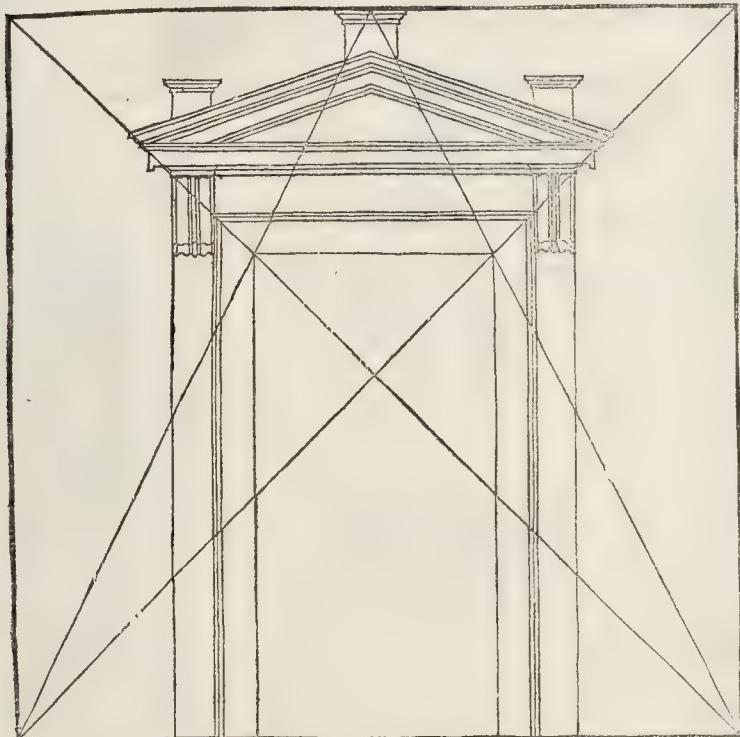


It happeneth many times, that a workman bath on eye or round window to make in a Church, as in ancient tyme. They vied to make them, and he doubted of the greatnessse therof, in which he will make after the rules of Geometrie, bee must first measure the brede of the place where he will set it, and therein he must make a halfe Circle; which halfe Circle being inclosed in a Quadrangle, then he shall finde the Center by tho Diagonall lines: then he must draw two lines more, which shall reach from the two lowermost corners about the Center, and touch the iust halfe of the Circle above: and where the sayd lines ext through the Diagonall lines, there you must make two Perpendicular lines, which Perpendicular lines shall shew the widenesse of the desired window: the list about it, may haue made the last part of the Diameter, being round in brede.

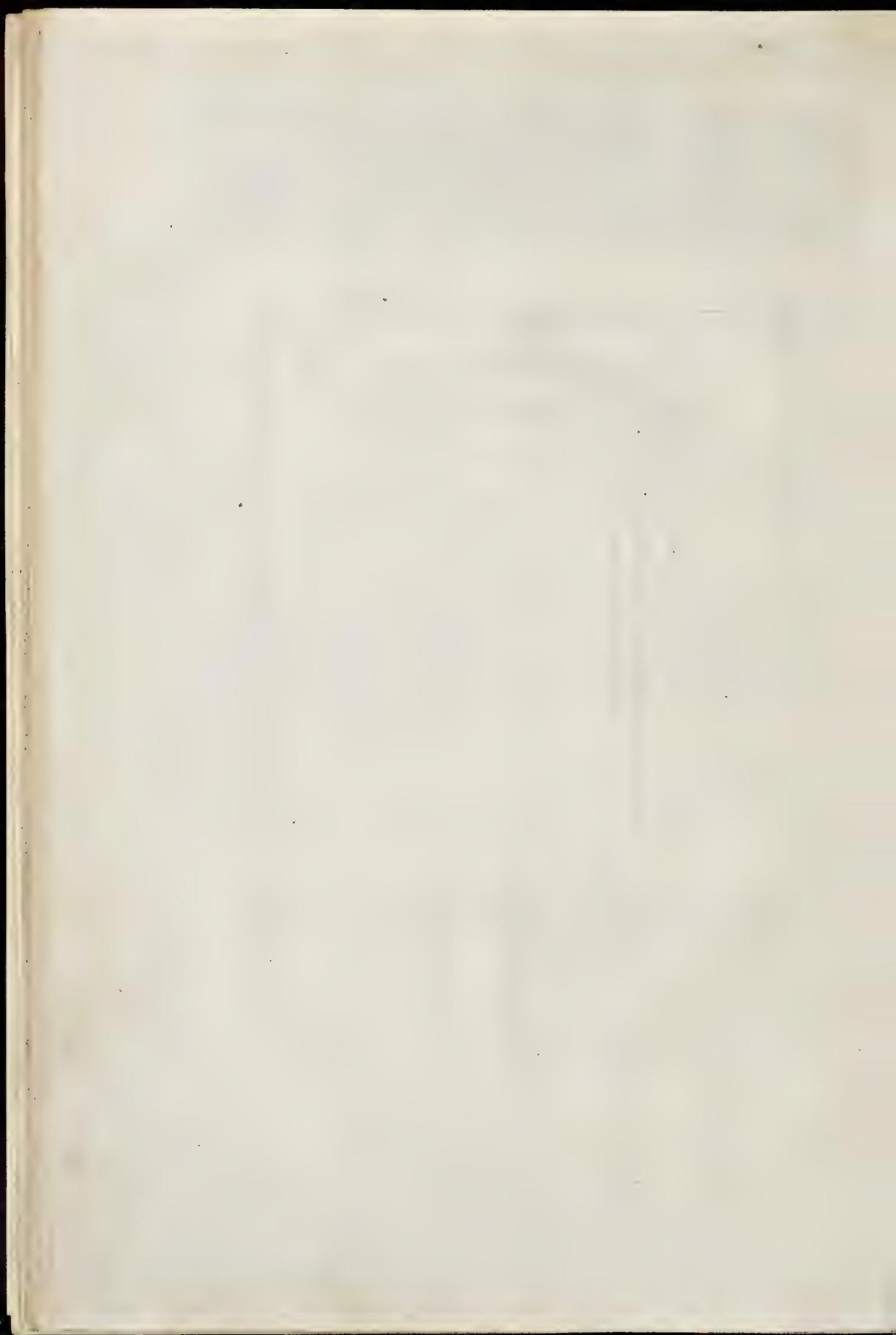


The first Booke. The first Chapter. Fol. 13.

If a Workeman will make a Gate or a Dore in a Temple or a Church, which is to be proportioned according to the place, then he must take the widenesse within the Church, or else the breadth of the wall without: if the Church bee small, and have Pilasters or Pillars within it: then he may take the widenesse betwix them, & set the same breadth in a four square, that is, as high as broad, in which four square, the Diagonall lines, and the other two crosse cutting lines will not onely shew you the widenes of the dore, but also the places and poynts of the ornaments of the same Dore, as you see here in this Figure. And although it shold fall out, that you haue thre dores to make in a Church, and to that ende cut thre holes, yet you may obserue this proportion for the smalles of them. And although (gentle Reader) the crosse cutting thorow or deviding is innumerable, yet for this time, lest I shold be too tedious,
Here end my Geometry.



Here endeth the first Booke of Architecture, treating of Geometry, translated out of Italian
into Dutch: And now out of Dutch, into English, for the benefit of our
English Nation, at the charges of Robert Peake. 1611.



The second Booke of

Architecture, made by *Sebastian Serly*, entreating of Perspectiue,
which is, Inspection, or looking into,
by shortening of the sight.

Translated out of Italian into
Dutch, and out of Dutch
into English.



L O N D O N

Printed for Robert Peake,
and are to be sold at his shop neare
Holborne conduit, next to the
Sunne Tauerne.

ANNO DOM. 1611.

The second Booke.

A Treatise of Perspectiues, touching the Superficies.

The second Chapter.

ALthough the subtil and ingenious Arte of Perspectiue is very difficult and troublesome to set downe in writing, and specially the body, or modell of things, which are drawnen out of the ground: for it is an Arte which cannot be to well expressed by figures or writings, as by an vndershewing, which is done severally: Notwithstanding, seeing that in my first Booke I haue spoken of Geometry, without the which Perspectiue Arte is nothing: I will labour in the briefest manner that I can in this my second Booke, to shewe the workeman so much thereof, that hee shall bee able to aide and helpe himselfe therewith.

In this worke I will not trouble my selfe to dispute Philosophically what Perspectiue is, or from whence it hath the originall for learned *Euclides* writeth darkely of the speculation thereof.

But to proceede to the matter, touching that the workeman shal haue caute to vse, you must understand, that Perspectiue is that, which *Vitruvius* calleth Scenographic, that is, the vpright part and sides of any building or of any Superficies or bodies.

This Perspectiue then, consisteth principally in three lines: The first line is the Base below, from whence all things haue their beginning. The second line is that, which goeth or reacheth to the point, which some call sight, others, the horizon: But the horizon is the right name thereof, for the horizon is in every place where locuer sight endeth. The third line, is the line of the distances, which ought alwayes to stand so high as the horizon is farre or neare, according to the situation, as when time serueth, I will declare.

This Horizon is to be vnderstood to stand at the corners of our sight, as if the workeman would shew a piece of worke against a flat wall, taking his beginning from the ground, wher the feete of the beholders should stand. In such case it is requisite, that the Horizon should bee as high as our eye, and the distance to see or b. hold that worke, shall be set or placed in the fust place thereabouts, as if it were in a Hall, or a Chamber, then the distance shall be taken at the entry thereof: but if it bee within, or at the end of a Gallery or Court, then the distance shall be set at the entry of the same place, and if it bee in a Streete against a wall or an houle, then you must set your distance on the other side, right ouer against it. But if in such a case the Streete is very narrow, then it were good to imagine a broad distance, lest the shortening fall out to be oretedious or vnplesant vnto you: for the longer or the wyder the distance is, the worke will shew so much the better and pleasanter.

But if you will begin a piece of worke of fve or sixe foote high from the ground whereon you stand, then it is requisite that the Horizon should stand even with your eyes (as I layd before) but if a man shold see no ground of the worke, whereon the vppermost part doeth stand (and a man would worke very high) it would not be correspondent with the eyes? In such a case a man must take vpon him to place the Horizon somewhat higher, by the aduice of some kniffull workman, which maketh histories or other things vpon Houses, thirtie or fortie foote high aboue a mans sight, which is vnfittingly. But cunning workmen fall into no such errors; for where they haue made any thing aboue our sight, there you could see no ground of the same worke, for that the notable Perspectiue Arte hath bridled them: and therefore (as I layd before) Perspectiue Arte is very necessary for a workeman: And no Perspectiue workeman can make any worke without Architecture, nor the Architecture without Perspectiue.

To prouethis, it appeareth by the Architectures in our dayes, wherein good Architecture hath begun to appere and shew it selfe: For, was not *Bramant* an excellent Architect, and was he not first a Painter, and had great skill in Perspectiue Arte, before he applied himselfe to the Art of Architecture? and *Raphael Durbin*, was not he a most cunning Painter, and an excellent Perspectiue Artist, before he became an Architect? And *Balthazar Perruzze* of Sienna, was also a Painter, and so well seene in Perspectiue Arte, that he seeking to place certaine Pillars and other Antike works perspectively, tocke lucha pleasure in the proportions and measures thereof, that he also became an Architect: wherein he so much excelled, that his like was almost not to be found. Was not learned *Jeronimus Genga* also an excellent Painter, and most cunning in Perspectiue Arte, as the faire works, which he made for the pleasure of his Lord *Francisco Maria*,

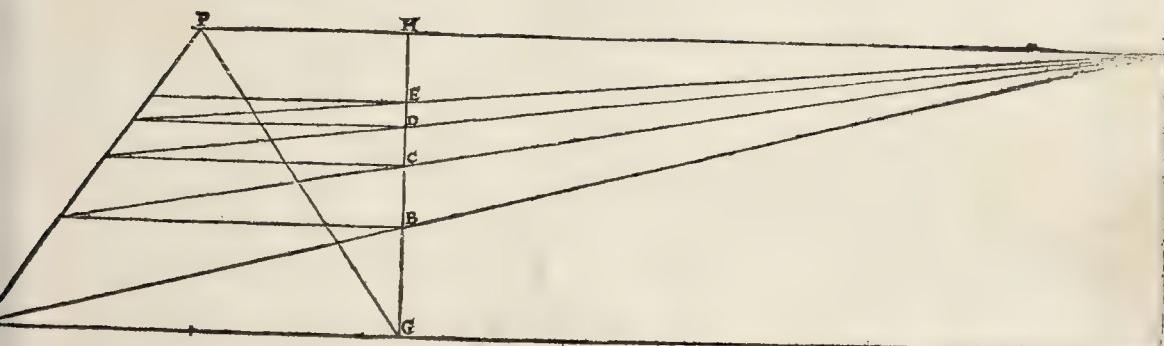
Duke of *Urbino*, can testifie; vnder whom he became a most excellent Architect: *Julius Romanus*, a scholler of *Raphael Durbin*; who, by Perspectiue Arte and Paynning, became

came an excellent Architect, witnesseth the same. Then to come to my purpose; I say, that a man must be diligent and vigilant in this Arte,

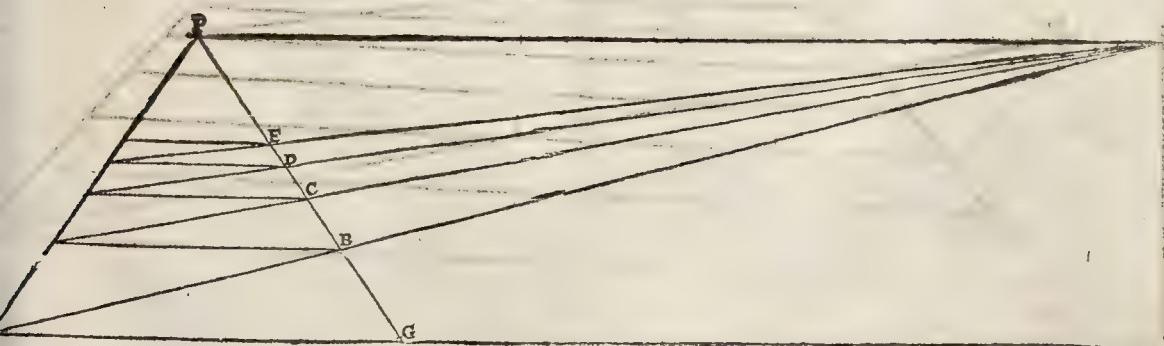
wherein I will begin with small things, and then proceed to greater; vntill I haue shewed you the full Arte and man-

ner thereof, as I desire.

The ende that men by small matters may attaine to greater, therefore I will begin to shew how to shorten a foyre cornered thynge, from whence all the rest shall bee derived. Then the Base of this foyre square thing, shall be A. G. and the height of the Horizon (as I have before) shall bee imagined according to the sight, and that shall be P. whereunto all the lines doe runne, as the lines of the foyres A. P. and G. P. then at the one ende of the Quadrant you must set a Perpendicular line, which is G. H. which done, then drawe the Base A. G. K. long enough, and then out of the Horizon draw a Paralell or an Equidistant line from the Base, as far as you will that the eye or sight shal stand from that which you will looke at; for how much the more you will have the foyre square thing to seeme shorter, so much farther you must goe with your sight i. from H. to behold the foyre square thing. And then, taking H. i. for the distance from the point L. to the corner A. draw a line, and where the line cutteth through the Perpendicular line H. G. thit is on B. there the termination of the shortening of the foyre square thing shal bee, as you may see in the figure following. But if you will make more foyre squares one above the other, upon the same Horizon or point: then you must draw another line from the shortening point of the foyre square or Quadrant, to the letter L. and where it cutteth through the Perpendicular line aforesaid, that is at C. there the second Quadrant shalbe cut off, and in like sorte you must draw another line to the point of the distance: and where it toucheth the Lead, or Perpendicular line thit is on D. you shall make the third Quadrant, th: same may be done with E. and so you must goe, vntill you come iust under the Horizon.

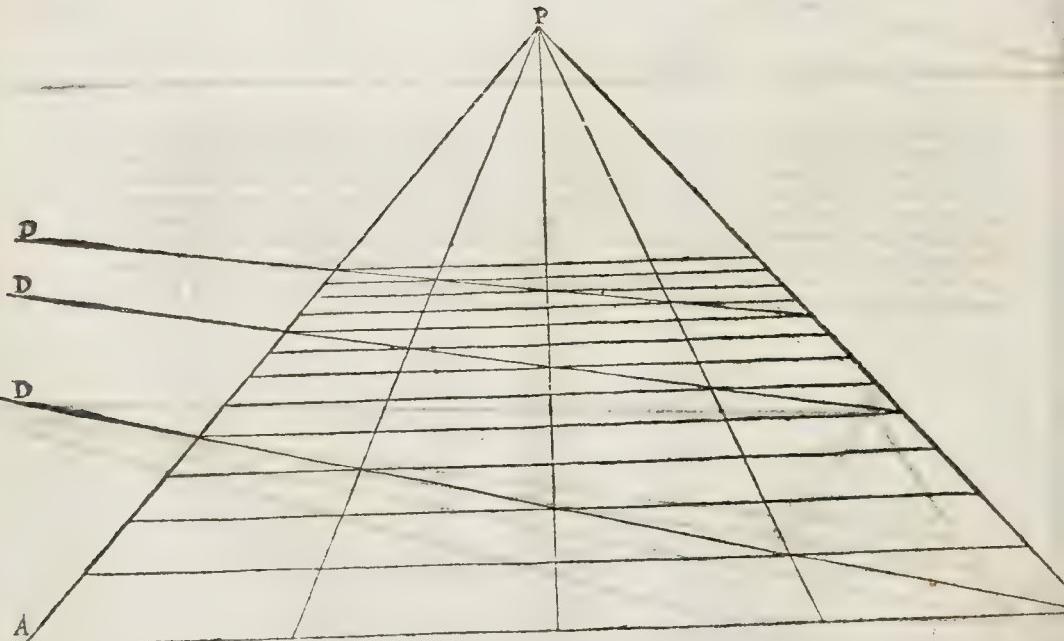


The rule aforesaid is the perfectest, and you may prove it by the line G. H. which is called the line of the Quadrant: but because it is cumbris with a greater number of lines, and so more tedious: therefore the rule ensuing shall be shorter, and easilier to be done: then the other: so: when the Base A. G. is drawn, and the two foyres make a Triangle A. P. G. then you must draw the Paralels of the Base & of the Horizon long enough; and as farre as you will stand from the worke to see it, so farre you must set the Perpendicular L. K. from the point G. then you must draw a line from the point L. to the point A. and where it cutteth through the line G. P. there shall be the termination of the foyre shortened Quadrant: and if you will place more Quadrants vpwards from that Quadrant, you must doe as I sayd before: and although there are other wayes to shorten a Quadrant, yet will I follow this order, as being the shortest and easiesst to be set downe in writing.



Of Perspective

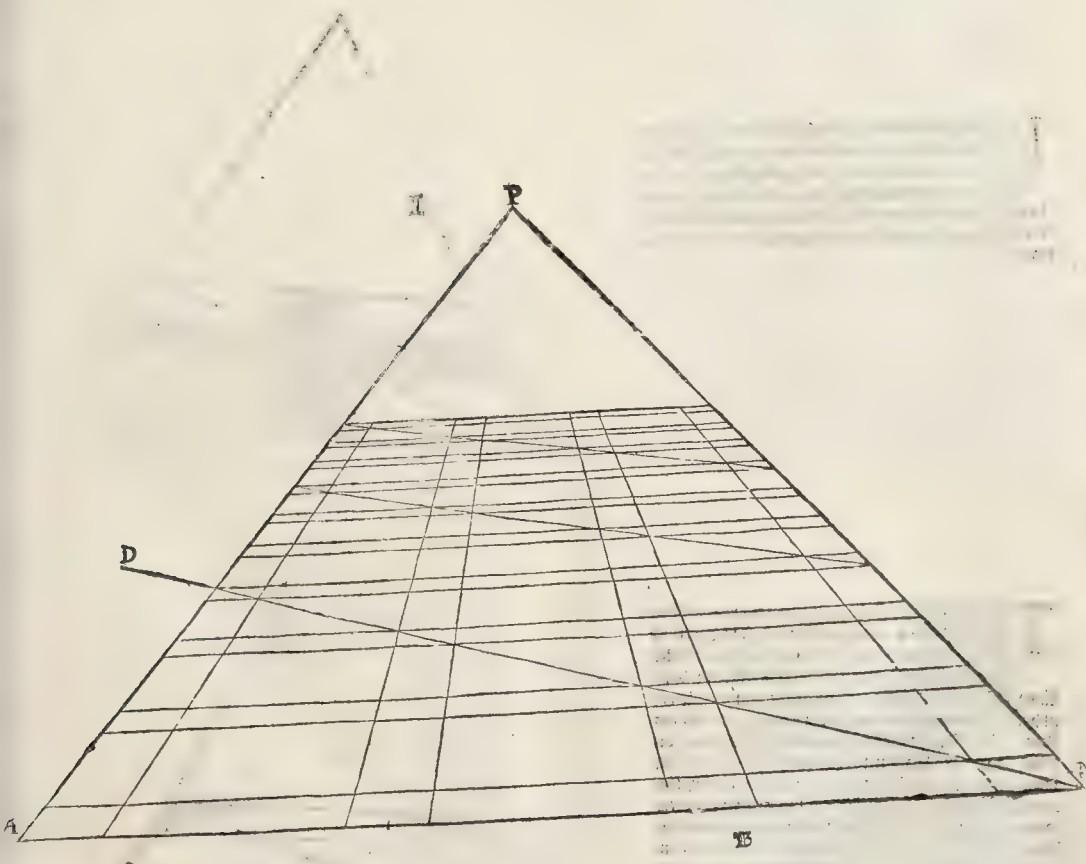
A Man must also use himself unto divers distances and grounds, and therefore you must make the grounds following, which is of thre Quadrantes pitch, in this manner. First, you must draw the line A . B. as long as the breadth of the worke shall be: Which line or Base, must bee divided into so many equall parts as are needfull, which being all drawn to the Horizon or point, then you must place the distances as farre as you desire, according to the rule aforesayde; for here is no place to set it in, although it is a length and a halfe from the Base, as you see it marked with I¹. Which Base, because it is of soure parts, therefore the first Quadrant containeth sixtene small Quadrantes, which are somme by the line B. D. for where that line cutteth through the soure lines, which go to the point; there you must drawe the Parallel over, that thereby the sixtene Quadrantes may be sound: But if you will set other Quadrantes upon it, then (as aforesayd) you must draw another line to the distance D and where that cutteth through the other lines that reach to the point, that shall bee the termination of the second Quadrant, containing init also soure times soure Quadrantes: The like must bee understand of the third Quadrant, (and more besides I need bes.) But you must also understand, that the lines marked D. runne all the distances, as it is taught before.



The second Booke.

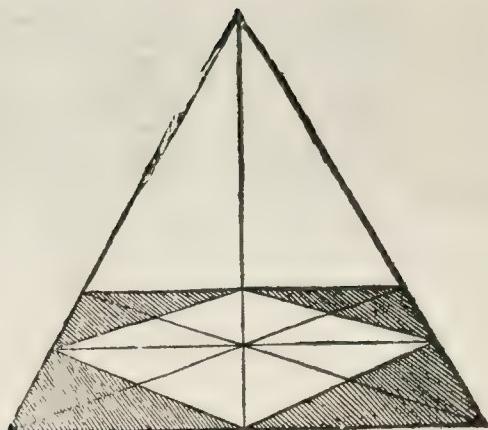
The second Chapter. Fol. 2.

If you will make a paement with great Quadrantes to be cut or Compasse with fachsen, fachen or lifts, as you will terme them, then vpon A. B. you must devide the fachen or Quadrantes, and draw them all to the Horizon; then you must imagine the distances as you are taught before; and the line D. B. being drawn from the point B. to the point of the distances; then by cutting through of the Horizontal lines, it will shew the terminations of the Quadrantes, Fachen, or Borders. To draw the Paralels, then if you will make the like Quadrantes somewhat higher, then you must draw another line to the distances; and where it toucheth the Horizontal or Radfall lines, there also you must draw the Paralels through; so you must also doe with the third, and the point of the distances of these figures stand as farre from A. as the line or Base A.B. is long: If you will make diuers formes in these Quadrantes, as Rotes, Crofes, like poynts, or egght poynts, I will shew the manner of them particularly, because I will bee as brefe heere in as I may.

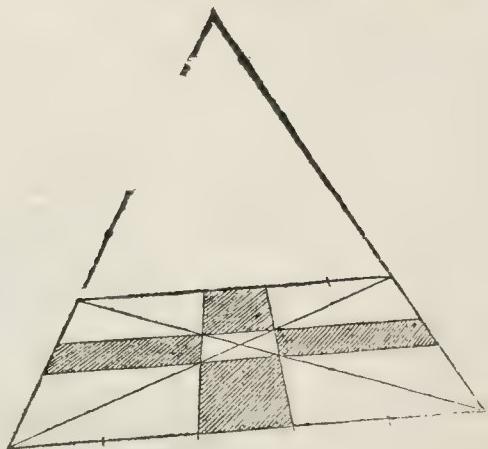


Of Perspective

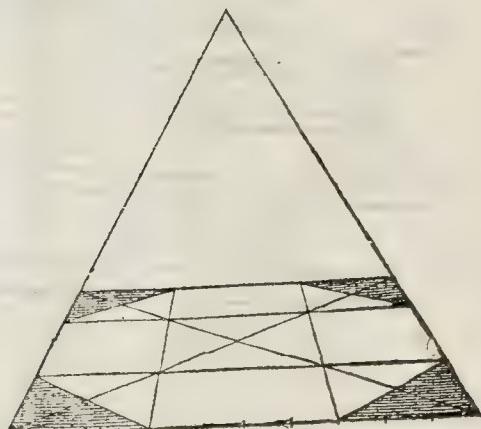
THIS figure is a Quadrant, containing in it a Quarter or an other Quadrant, which with the points thereof toucheth the sides of the outermost Quadrant; whereby it is but halfe so great as the outermost Quadrant, as I have taught you in the first Volume of Geometrie, and the manner to make this, is thus. First, you must make a Quadrant (as you are taught before) with his distances; and in this Quadrant you must draw two Diagonall lines, and also the right croise line, whereby you may easily finde the Quarter, as you see it in the figure directly against this. In this sort you may make the Quarters in the other Quadrantes before set downe, that is, to draw Diagonall and croise lines in them, without taking other distances.

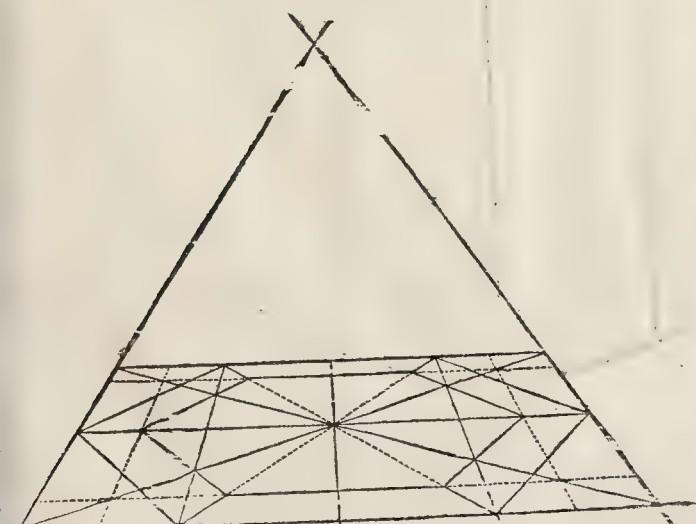
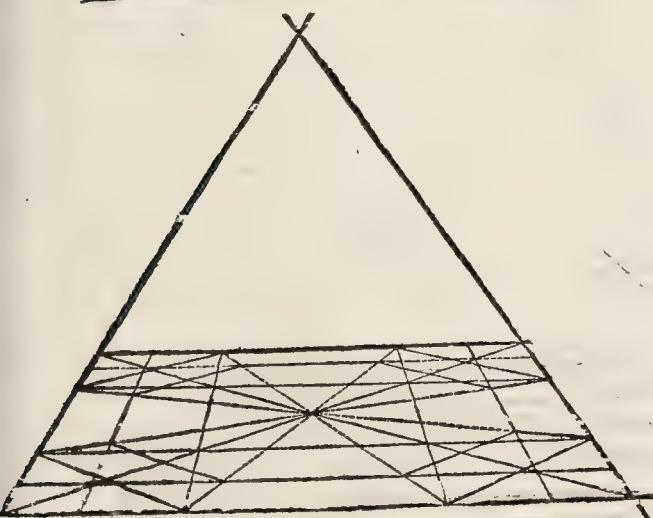
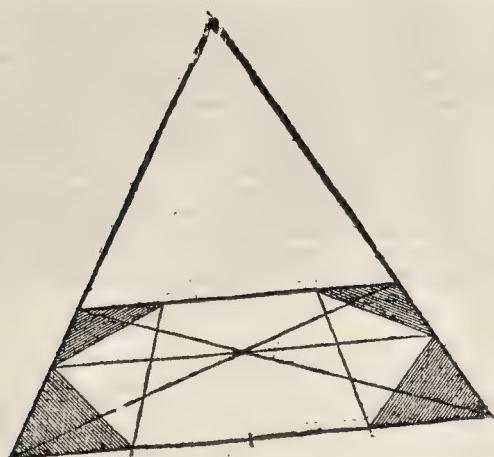


IN this figure there is a croise shewed (to make it) you must divide the latell line or Base of the Quadrant in fower parts; of which fower parts, one part is the breadth of the croise: which breadth being drawen to the points, the Diagonall lines will shew you the Parallel lines of the croise, to be taken addeis.



THIS eightpointed figure you may see in Perspective works in divers formes, which few are all difficult enough: but that I may shew the easiest way so rare as I can in this my writing: Therefore I have set downe the manner therof of hercunte annexed, which is very easily; and that is thus. The Quadrant being made in hastening, you must divide the Base into ten equal parts, and on either side you shall leue three parts, and in the middle fower parts, then the two lines being drawen to the Points, you shall finde the terminations of the Parallelines, by the Diagonallnes, whereby you may close up the eight corners, as you may see it in the Figure.





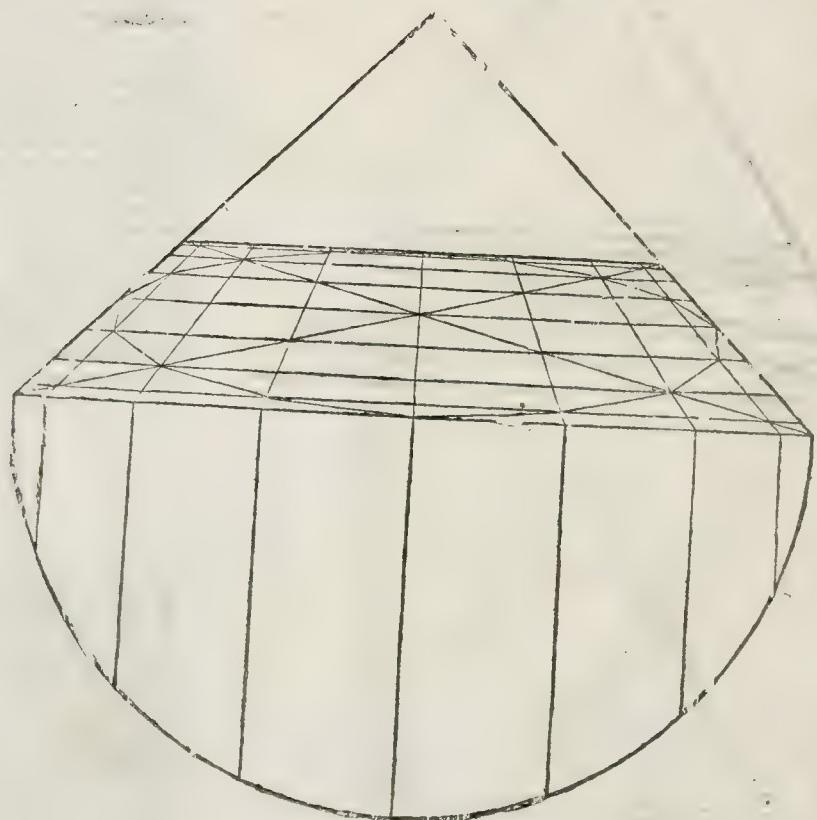
THIS shortest way to place this fire cornered Quadrant, in Perspective workes, is thus; When the Quadrant according to the rule aforesaid, is placed in shorthening, then you must make foure equal parts of the Bases, whereof two shall be in the middle, and on each side you must leane one, and then draw the lines upwards to the Horizon or points; then you must draw the Diagonall lines, and in the middle where they met together, you must draw a Parallel line cleane through, by the which you shall finde all the points to make this fire cornered Figure.

NOw I haue shewed how you shall make simple or plaine Perspective workes of four corners, of fire corners, and eightsquare corners; Now I will shew, how you shall make them double, that is, that every simple figure shal haue his band. When you haue made a plaine Superficies of the points, according to the rule aforesaid; then as much as you will haue the band or bale to be in breedth, that you must draw upon the Base, and draw that also vp to the Horizon; and where the Diagonall lines cut through it, there you must draw Parallel lines both under and aboye; and then draw two Diagonall lines more, out of the foure innermost points or corners of the fire cornered Superficies; and so you shall finde your terminations to shut or close vp your small fire points or cornered Superficies. Which second Diagonal, Parallel, and Horizontal lines are all drawen with pickes, for a difference from the first lines; that you may know them one from another.

THIS like must bee done with the eight cornered Superficies or Perspective work, for when the same is made with in a foursquare, making the Compas of what breedth you will, according to the rule aforesaid: then out of every point or corner of the eight square, a small line being drawn to the Center, you shall finde the termination to shut vp the innermost eight square; and then, when from point to point the lines are drawn, then on a square or Compasse is full made. This eight square forme may bee changed into a round, touching the middle on either side, or else without, over the points or corners; a good workeman may easly draw a circuler shorthening round line with his hand.

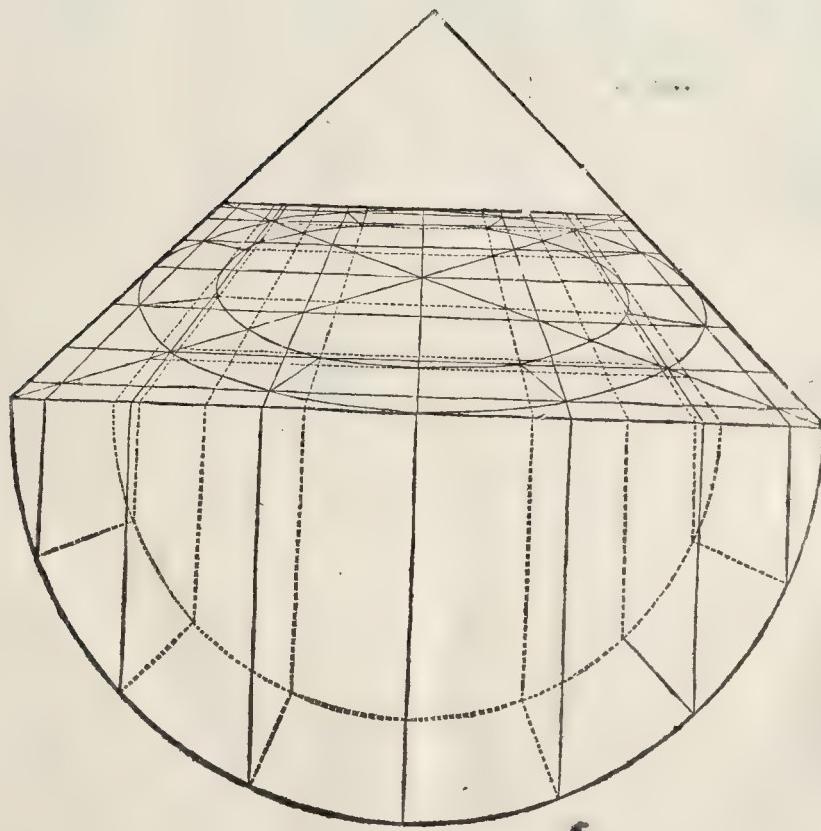
Of Perspective

ALTHOUGH I have said before that a man may make a rechte Circle aboue an eight square, yet for more securitie you may by this way attaine to a more perfection herein; ioy that the more points of stirs the Circuler forme hath, the round Compasse of Circle will be the fuller. But to make this Figure, it is necessary to make halfe a Circle under the Base, and to devide the Circumference into as many parts as you will, so that they be even; in this forme the halfe Circle is devide into eight parts, so that the whole Circle must bee sixteen parts: which being done, you must set Perpendiculer lines in all the parts of the Circumference, as farre as to the Bases of the shewtened Quadrant, these parts being elevuated to the Horizon, and two Diagonall lines drawn in the Quadrante, they by cutting through the Horizontal or Radiall lines, will shew you the Parallel lines. Then if you will draw a little Diagonall line, beginning at the middle point of the Base, from the one side unto the other, and so from the one point unto the other spirals going ouer the points: then the formes will be closed, as you see them heere; whereby it will be easie for you to draw a second forme with your hand, for it is impossible to bee done with the Compasse to make it shapte well. This figure you must be expert in, and you must also understand it well, and so you must thinke that I have before set downe, before you proceed further: for they will serue you for many pieces of worke hereafter entailing, as you shall both see and finde to be true.



When you understand the Figure aforesayd perfectly, then you must proceed further, and shal the round Circle also with an edge or border, according to the breadth that you will have; you must also make the innermost halfe Circle, and the aforesayd parts of the great Circle drawn towards the Center, will come into the male Circle: the which parts of the small Circle being also set downe in Perpendicular lines with prickes not to dacken the other lines, and those likewise that are drawn to the Horizon. Then by cutting through of the Diagonal lines, you shall finde the Parallel lines. To make the innermost shortening a round or Circle, according to the first example set downe, as you may see; the first round with perfect lines, and the second with prickes, as you see in this Figure.

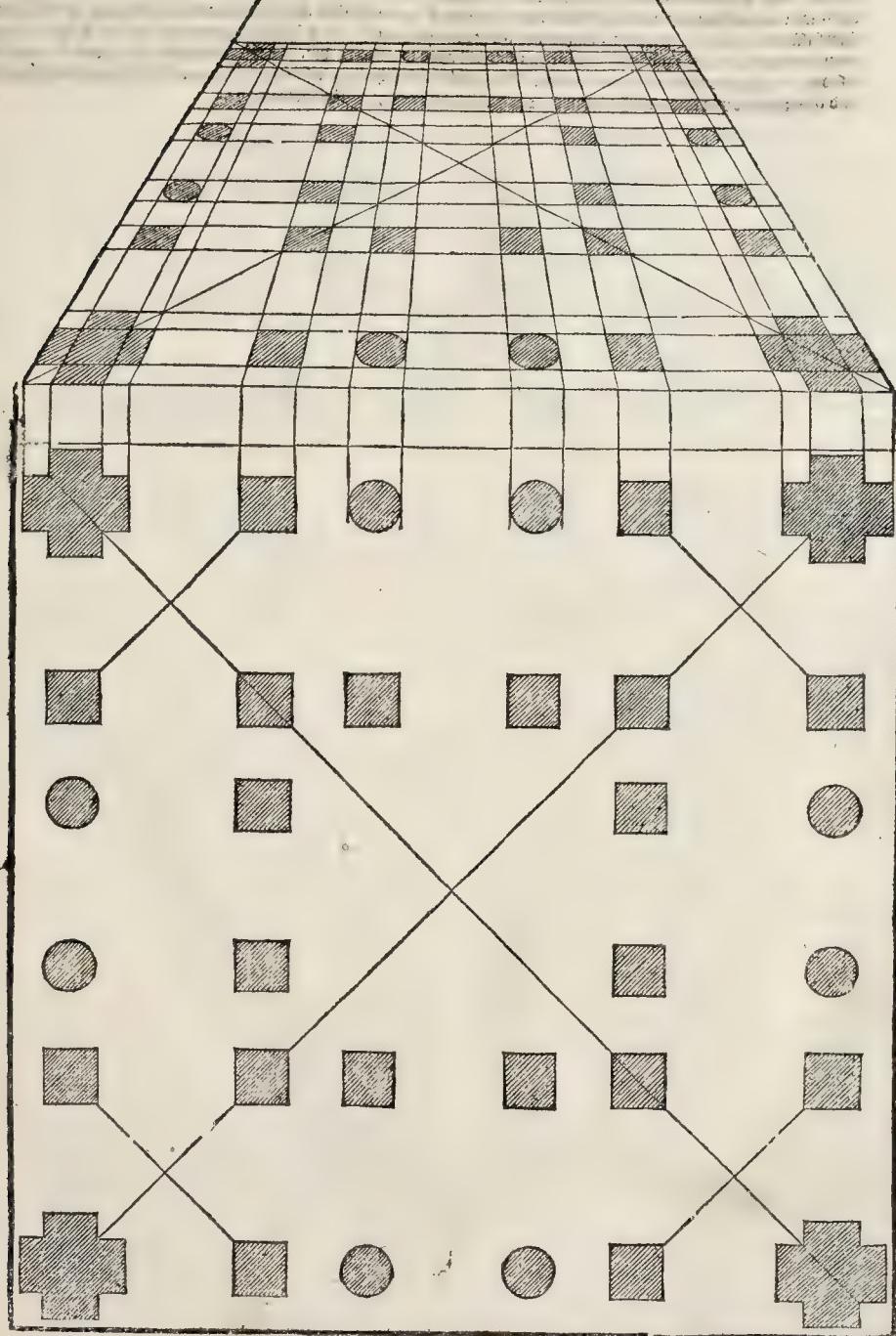
But, friendly Reader, you must not be weary to bee long in learning this Figure, or in making it often times, till you can doe it perfectly and understand it well: for I am sure and certaine, that it will bee very hard unto many men, yet without this, you cannot doe much; and he that can doe it well, shall easily understand and make all the things hereafter ensing.



Of Perspective

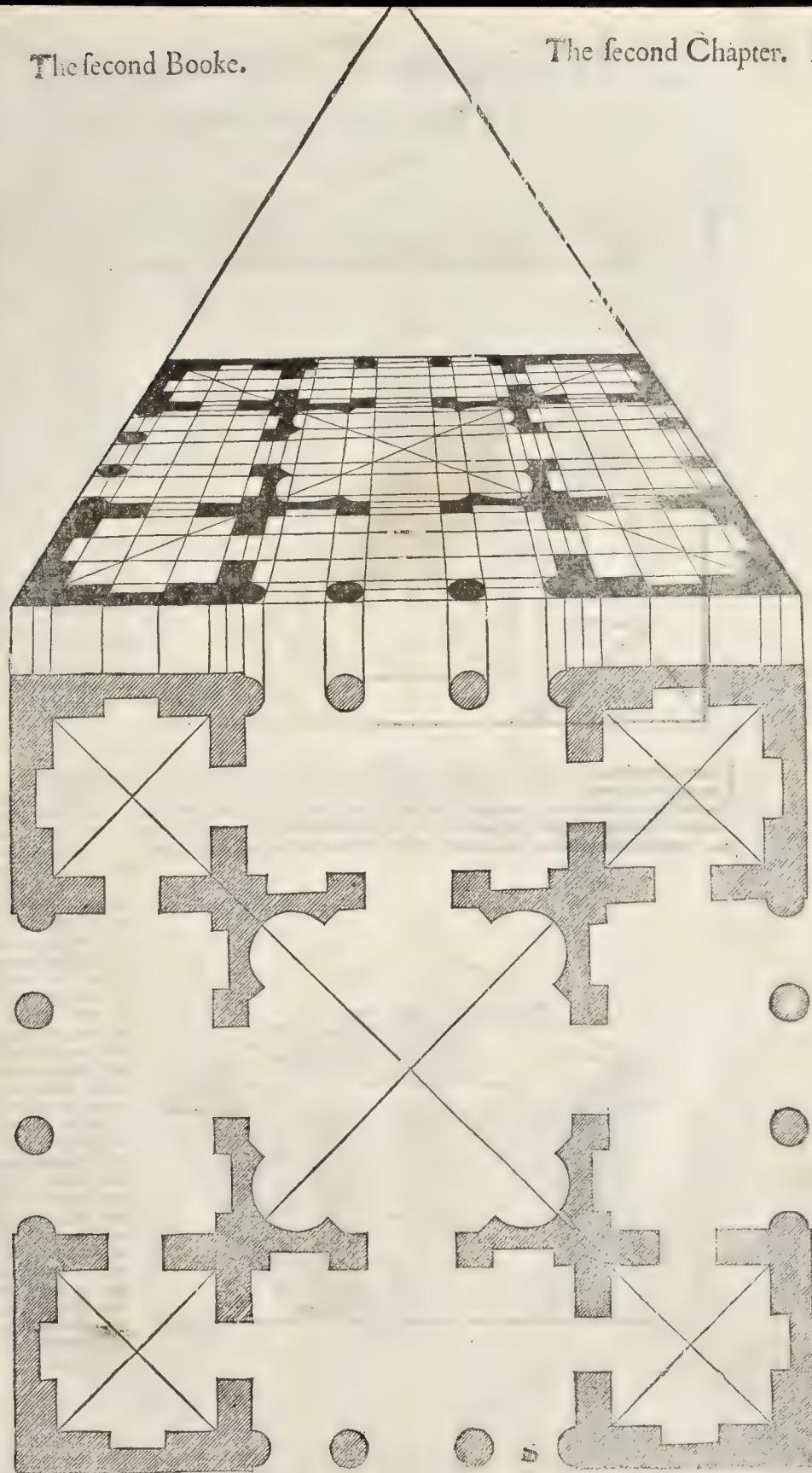
I talleth ouer many times that a wozkeman will shew a House both without and withyn, which to doe, he must place the ground in Perspective forme, that he may the soore and better draw that vp whiche he will have scene, and to leave the rest on the ground; if then you will place a foundation in Perspective manner, to make it well, you must first set it on a flat forme, that out of that you may draw it into a Perspective forme.

To doe this, I haue let done a kinde of open Building, that a man may the easelier conceue it for a beginning, for when a man can doe this well, he may after that place many other and harder things in Perspective forme. I need not to take any great paines to write or shew how this shortening shold bee done, because it is so easly and so openly placed in a figure that a man may prelenty conceue it; for that leading all the lines that goe from the corners and out-sides of the flat ground to the base, which you will make in the shortening; and the same being drawne vp to the Ho-
rizon, together with the imagination of the distancies: then you may shat or clost vp the shortening fourre square. Then you must draw the Diagonall lines therin, through drawing the Parallel lines, presently you shall find the way how to come the Columnnes and pilasters, so that it is impossible to fail therein; and especially for those that doe well con-
ceive and understand that, whiche I haue set downe before.



Of Perspective

This Figure following is somewhat harder then that before, but when you goe from the smalest to the greatest, you conceave things the easier, and specially he that will learne this Arte; he must not leave nor refuse to exercise any of the Figures before set downe, but must vse all the diligence he can to be perfect in them all, and hee must also take a pleasure to doe them all, otherwise he that will omit now one, and then another, because he can hardly understand or conceave them (although I labour and straine at all times in setting downe these rules to them all difficulties) shall little profit himselfe in this Arte. The manner how to place this ground in Perspectiue forme, is easily conceaved, without any other demonstration: for you must followe the maner or operation of the figure before set downe, with his advertisement, that the two Diagonal lines enymore direct the wozhe, together with the Horizontall lines: and although a man may shew many sortes of grounds that are to bee placed in shortening, yet these two shall suffice for this time, because I haue other things to entreat off: for a skilfull workeman, by the helpe of these, may forme others for his purpose, and such as he shall haue occasion to vse. And if he will erect any piece of woake for a shute, he must necessarily first measure the Orthographic with the same measure that he measureth the ground wherthal, and then place it in a shortening manner, as when time serveth, shall be the wed.

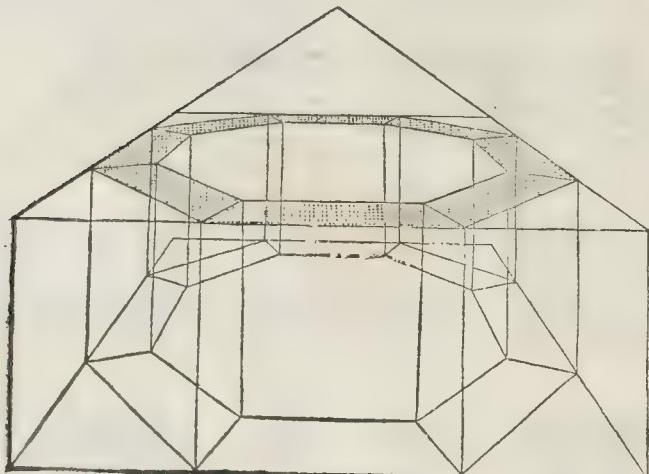


Of Perspective vworkes , touching Bodies or Massie things.

The third Chapter.

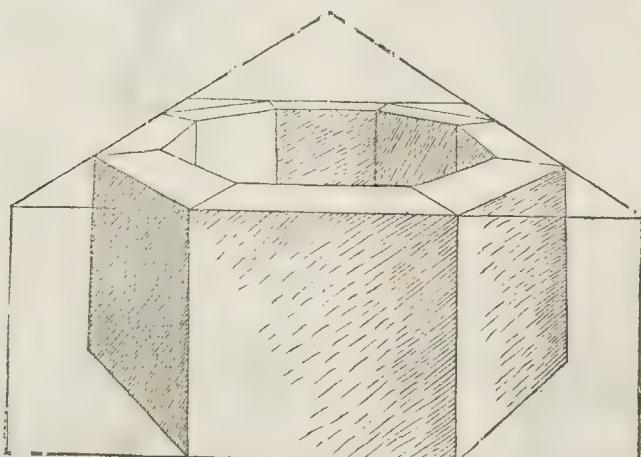
Touching the groundes and other Superficies of divers forme, I thinke I have sufficiently spoken. Now I will speake of Bodies which are drawne by out of the grounde: and first, you know that I haue taught before, how you shou'd frame an eyght square forme plainly in it selfe; and then, I haue shewed how you shou'd compasse this Figure about, with a border or edge: but if a workeman will shew an eyght square Figure in Perspective

wise, as a Well; then he must first make the grounde, as he is taught before, as high as hee will, that the said Well shall stand elevated above the grounde or fute therest: there hee must make the same forme once againe, drawing it to the same Horizon; then from all the uppermost corners or points to the lowest; you must drawe Perpendicular lines as well from the innermost figures, as from the uttermost, wherby the throughtring eyght square bodies will be formed, as you may see in the Figure heretofore annexed,



I haue spoken before of the open frame of a Well with eyght forme or corners, which is necessary to be learned, to make it, before you make the solide body thereof, as this figure sheweth, which is the same that is before shewed, both forme and measure, but all the lines which cannot outwardly be seene, are hidden; and there is as much difference betwene an open body and a solide, as there is betwene the modell of a mans body, that is nothing but bones without flesh and skinne: and a living body of a man covered ouer with flesh (although it is hidden under it.)

And as thof Painters are much perferter that haue seene, and perfectly beheld iight Anatomies, then others that onely content themselves with the osse and bare blosme of the Superficies, so it is with Perspective workes; for they hat wel understand and perfectly bear in minde the hidden lines, they shall better understand the Arte than others, that content themselves onely with ymagine of outward Superficies. It is very true that when a man hath suffitiently expermented, practised and beareth in his minde these inward hidden lines, then helping himselfe with the principall, hee may make many perfect things without using all this latour.

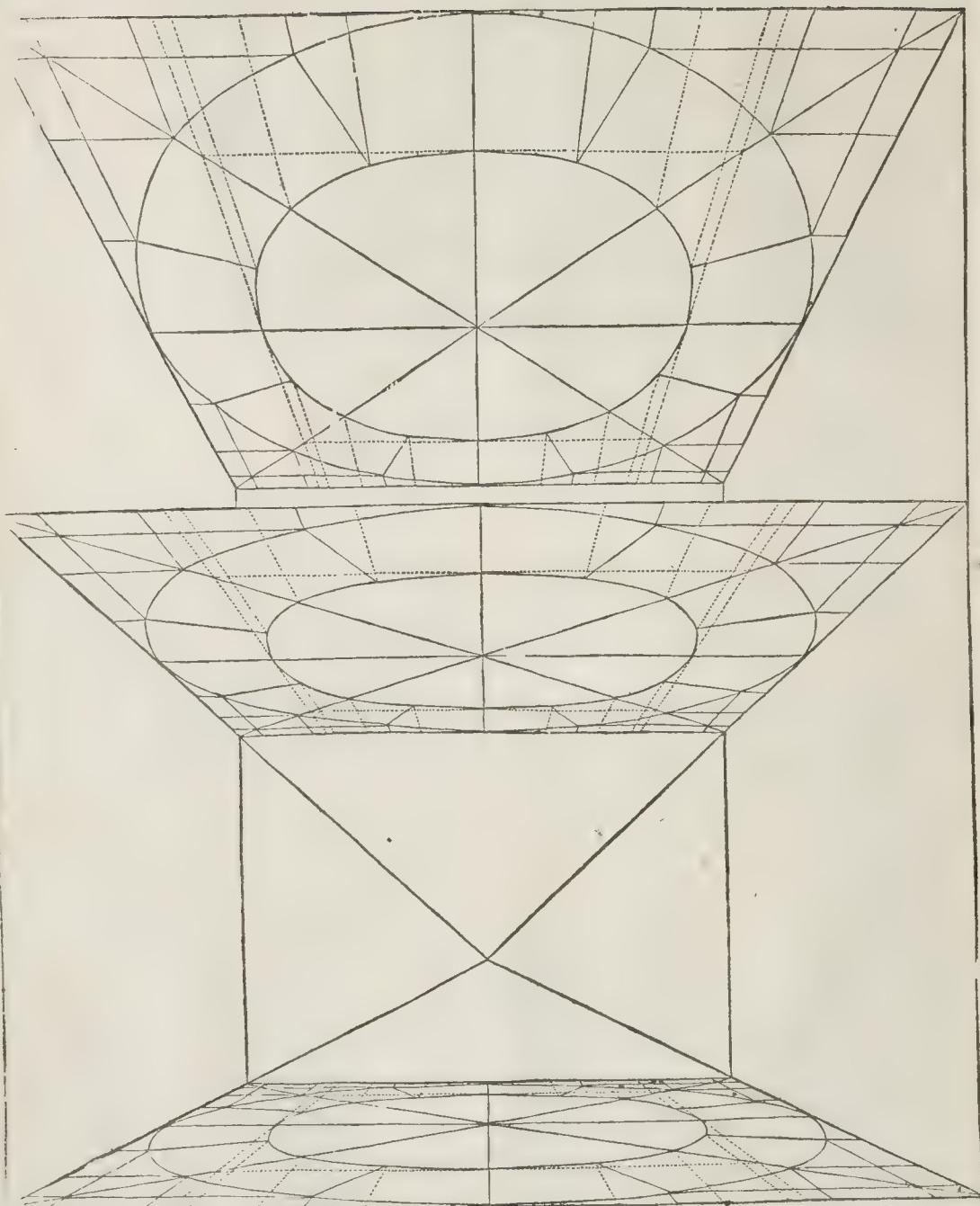


¶ These thre figures following, every one is drawnne out of the fourresquare, in such manner as I haue taught before; and they goe all thre to one Housson or point as they shalld do, or se neede require; by the which figures any man may helpe himselfe in many things, as I haue further declared: and he that is perfect in these, may make all kinds of round formes, and without knowing of these, hee can doe little in round formes. For out of these figures you may draw a round Solute or Pyramidall Building with Pillars, or without Pillars; and also a round windyng paire of Stayers: for this Figure will shew you how to make the Stayers round, with other things more, and yet not without your owne industrie: for the things that by these may be made are wonderfull and infinite, so that you ware not weary, and spare no paynes till you are perfect in them, because that the bowing or Arches or gates and other things will see ne hard unto you, as I will hereafter shew you; notwithstanding that they take their beginning altogether from these.

But if any man that desirereth to leare this Arte, will at the first understand these figures, as some blitly will take vpon him to doe it. I beleue certaintly, he will bee put to an non plus, and deceave himselfe; but if by learning all the former things, he procedeth unto these as well in Geometricie as in Perspective Arte: Then, I say, he is of a very grose understanding, if he cannot understand or conceane these figures, or the figures that hereafter follow.

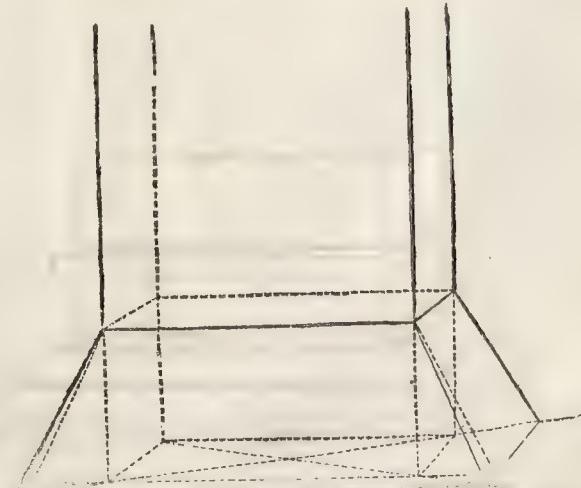
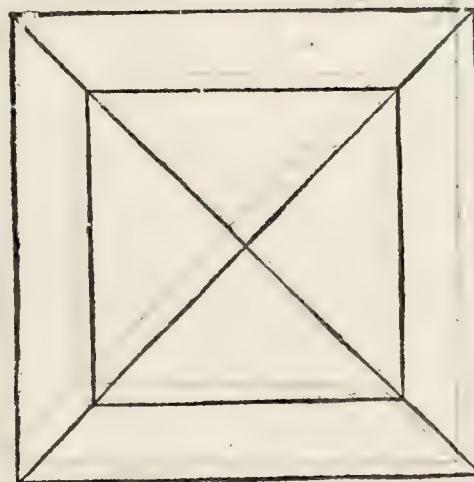
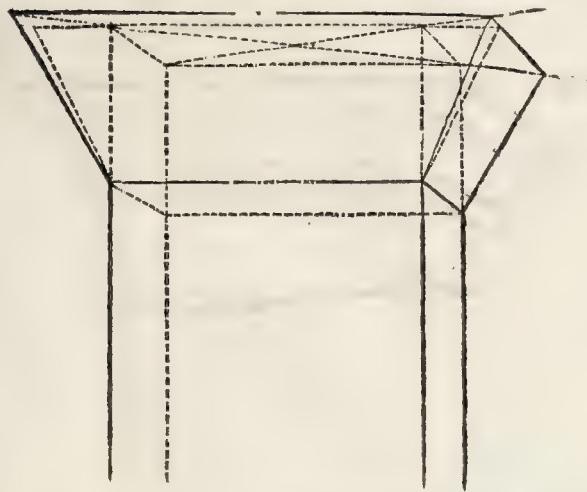
These three figures, to speake truthe, are but Superficies; nevertheless, if you draw Perpendicular lines from all the terminations, as well within as without: then you shall have a through cutting or open body, and the innermost lines couered, then they will be a Hally body: And wonder not, gentle Reader, nor let it be strange unto you, though I doe sometimes make along discourse of some things, for (as I saide before) they are not only learned by many words and great paines, but it is also necessary that they were shewed unto some men playnly by drawing them before them; that they may the better conceane them.

Of Perspective

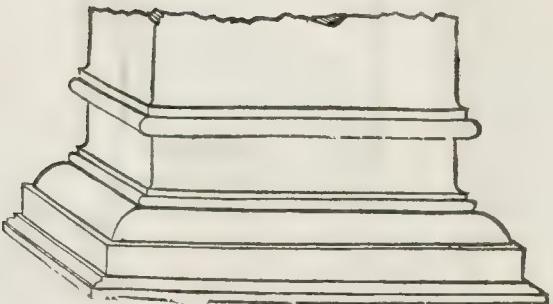
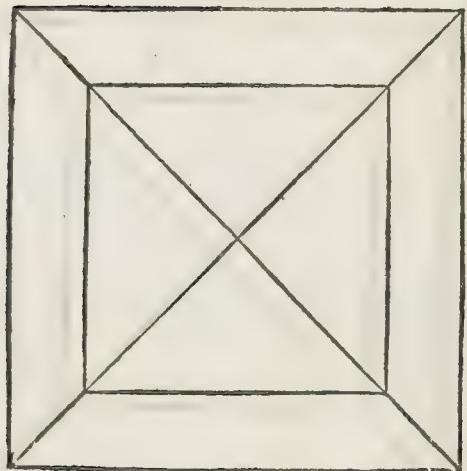
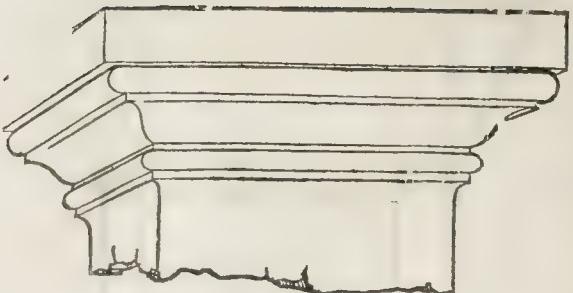


THIS most part of great Rivers or wa-
ters falleth that fall downe from high
Hills or Mountains, by meanes of tem-
pests with great force and power, when
they enter into a Valley, then sometimes they
run out of their Channel, and so much ground
as they then bespreypon on the one side, so
much they lose againe on the other side; and so
doth Perspective worke in cogned things,
so that as much as a man loseth of the poyn-
t or corner wheron he looketh, so much greate-
r the other poyn特 or corner sheweth that
standeth out, which is shewed in the Figures
hereunder annexed.

The Reader must then marke that the
square in the middle signifieth the thickenesse
of a foursesquare Column or Pillar, and the
border that is without and goeth about it,
signifieth the thickenesse or bearing ent of the
Wales and the Capital. The Figure vnder
this plate sheweth the Base, and the uppemost
Figure is the Capital; the manner how to
shorten them I will shew you: You must
make the Pillar flat before without thicknesse,
and upon it you shall forme the Wales and
Capital, making the Perspective or bearing
out thereof on either side alike, but you must
draw them lightly as the prickes herin set
downe doe shew you: then draw the side of
the Pillar which you will haue sene towards
the Hosten; and having found how thicks
the decreasing or shortening side must bee, by
the rules that are shewed in the first part of
Perspective work, so you shall haue the shorten-
ing ground of the Pillar, wherein you must
lightly drawe the two Diagonall lines long
enough through, and from the Wales below,
which is sene in the shortening; you must
draw a line towards the Horizon, which you
shall also let goe downe or sinke so farre, till
it reacheth beneath the Diagonall lines, and
there shall be the terminations of the shorten-
ing Wales: and thus you see that the Perspec-
tives take somewhat off from them,
that is, the space betwene the poyns and the
full blacke line; then from the terminations
to the other uttermost poyns of the Wales,
you must drawe a Parallel line under the
ground of the Pillars, so long that it may
touch the Diagonall lines, and there you shall
 finde that which is taken of from the Wales
on the one side, and given to them on the o-
ther side, and the Perspective of the Wales
sheweth, that the one poyn特 is drawn in-
wards, and the other commeth further out,
then the uppemost line of the Wales being
also to the Horizon: then vpon the shortening
side by a lit: you finde the third parte of the
Wales beloue, and that which is belyoken
of the Wales, you must understand the same
also of the Capitals.

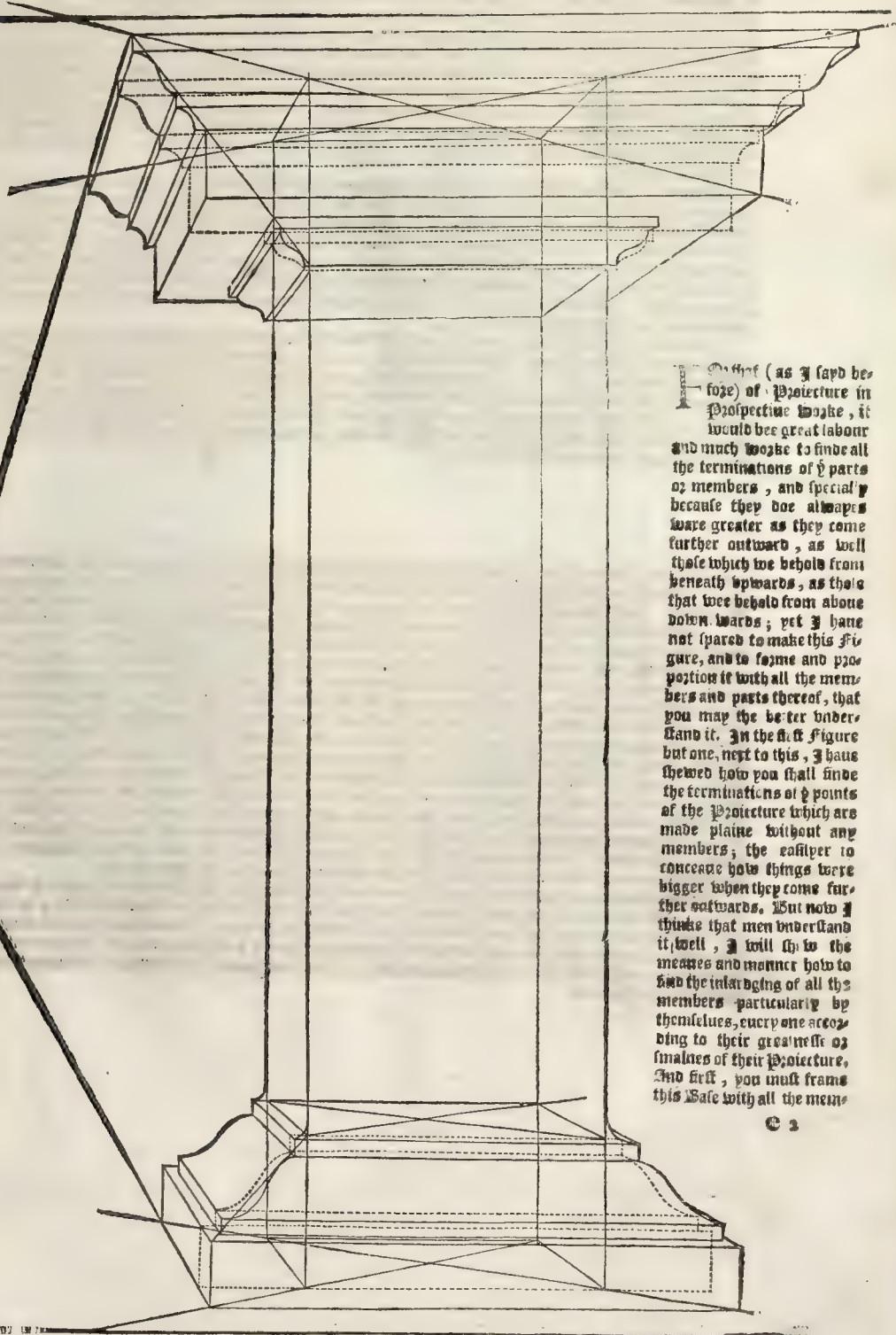


Of Perspective



THE other Figures are the same which are shewed before; the fist were hollow, but these are perfect and solide with all their members, and although that in the Figures before I have not shewed how you shold forme and frame these members, which in truth would be a very confused and troublous thing to set downe in writing; therefore I have only shewed the fist terminations, that a man may kepe them well in his memory, and in these present Figures I have shewed how they shew in a mans sight, that you may see the effect that they worke: but from henceforward because (as I said before) it is a troublesome thing, I will make another forme of the n with all their members by darke lines: and then (according to my ability) I will set downe the manner how to finde the terminations of the members one after another, so all of them grab a little one ouer, or more then the other.

But you must consider that these Bases and Capitals on the one side gaine inward, and on the other side beareth out, which you must well remember, that you may fikel bee well instructed herein touching that which you will make. For it is true that the Theorie consetteth in the understanding; but experience is gotten by practise and right use of handling: Therefore the most notable Painter Leonardus Vinci, was never pleased nor satisfied with any thing that he made, bringing but little worke to perfection, saying, the cause thereof was that his hand could not effect the understanding of his mine: And for my part, if I shoulde do as he did, I shoulde not, neither would I suffer any of my worke to come forth: for (to say the truth) whatsoever I make or wroote, it pleased me not: but (as I say in the beginning of my worke) that I have rather exercisit in worke that small talent, which it hath pleased God to bellow vpon me, then suffer it to lye and rot under the earth without any fruit; and although I shall not please thereby such as are curious, to set downe the ground and perfection of al things, yet at least I shall helpe yong beginners that knowe little or nothing thereof, which hath always bene my intent.



¶ Of the (as I sayd before) of Projecture in
 Perspective Worke, it
 would bee great labour
 and much worke to finde all
 the terminations of þ parts
 or members, and specially
 because they doe always
 ware greater as they come
 further outward, as well
 thase which are beheld from
 beneath upwards, as those
 that are beheld from above
 down wards; yet I haue
 not spared to make this Fi-
 gure, and to forme and pro-
 position it with all the mem-
 bers and parts thereof, that
 you may the better under-
 stand it. In the first Figure
 but one, next to this, I haue
 shewed how you shall finde
 the terminations of þ points
 of the Projecture which are
 made plaine without any
 members; the easilier to
 conceire how things were
 bigger when they come fur-
 ther outwards. But now I
 think that men understand
 it well, I will shew the
 meane and manner how to
 finde the intarding of all the
 members particularly by
 themselves, every one accor-
 ding to their greatness or
 smalenes of their Projecture.
 And first, you must frame
 this Base with all the mem-

Of Perspective

vers, and with the right perspective thereof, to bee without any so foyting before, yet you must draw it lightly with a piece of Lead, or some other thing, as it is shewed unto you here with penke; then in the ground or foot of the Pillar you must draw the two Diagonall lines long enough out, and thereby (as I sayd before) you shall finde the diminishing and the increasing of the particular parts of the crakes of the said Bale, whereas the undermost line or foot of the crake of the Bale, beare much more breser and lenger then those that are marked with the pickes; then at each corner of the Creast of the Bale you must draw an upright line almost as high as the first creast of the Bale (although I haue done it) but upon the outermost point not to comber the worke within: then you must draw the uppermost corners of the first Creast with pickes also, toward the Horizon, which so towards will touch against the two upright lines; and there shall be the terminations to close or shut vp the second great Creast by a full blacke line: then draw another blacke line from the innermost point of the Creast upwards to the Horizon, and there the shortening Creast shall be closed.

And as this Creast or Plinths is closed and drawn on all sides with blacke lines, so you must do with all the other lines of the Bale, so when from the uppermost corner of the first marked Bale you draw a holding line to the innermost corner of the greatest Creast with the blacke lines, by it you shall lightly find the terminations of all the parts or members, drawing the corners of the first Bale towards the Horizon. And when you haue formed all the innermost corners of the Bales, by the Horizontall line you may easily doe the second, and by the Parallel lines the outermost of all; although by the lines of the distances, you may bring the said corners somewhat nearer as you may see by the Diagonall lines. But at this time I will not speake of that difficult or hard worke, for he that hath any understandinge herein, may herewith help himselfe.

That which is here saud of the Bales, you must also understand of the Cornices, only that every thing is contrary, and where you set Perspective lines below, which cut through the Horizontall or Radiall lines, so you must also fall about the Lead lines or Cath: con: upon the Horizontall lines, as you may better see it and learne it in the Figne, then it can be exprest by words: and you must not be afraid or abashed, although at first you cannot concerne it, for that by practising you shall in time finde it; for it is not sayd that a man shall or can learne all things at once in one day: by this Cornice you may make all Cornices, bee they higher or lower, harder or easier, alwayes drawing every member and part towards the Horizon as it should be done.

Although there are divers maneres & wyes to place Columnnes one behinde the other, standing upon one ground in Perspective wise, thereby to make Portale, Gallerie and other things, yet this hereunder named is the easest. First, you must make a Pavement with a quantitie of fourtene need Quadrants, as it is also shewed in the beginning of this Booke; which may be of such bredth, as you will: See that these fourte square stones are two fote broad, which shall be the thickenesse of a Pillar: between the two first Pillars beneath the breadth, there shall be eyght square stones, and the height of the Pillars made of what quantite you will; and they being raised toward the Horizon, then you must draw two seuerall lines over both the Pillars, and then out of the middle of the first line you must make two halfe Circles aboue upon the flat side before, and divide them in as many parts as you will; which parts shall be dwaine to the Center of the Circle, standing in the uppermost line: then out of the middle of the two seuerall lines you must draw the lesse halfe Circle, and all terminations of the flat Arch being dwaine to the Horizon, then the first Arch or Gate is made: the other two Pillars upwards dwaine to the Horizon, then the first Arch or Gate is made: the other two Pillars upwards shall also send eyght Quadrants distant from the first Pillars, which will make a fourtene cornd place on all sides: containing 64. square stones: and you must doe with this gate as you did with the first, nely (when they are all of one bredthe as these are) you ned not dwaine the Arches againe, for the Horizontall lines of the stones of the first Arch will shew to you the terminations of all the other Arches, and also how long the Gallerie must be, and how many Arches it must contayne. I haue placed no Arches here in the fives, because I would not comber you to much at this time; but I will speake thereof hereafter perticularly.

The two Dores on each side are both partly covered with the Pillars, but the wydernes of them is of fourtene Quadrantes, besides that from the corner of the dore to the Pillars on each side there is two Quadrantes, as youse the halfe therof; and the other halfe you must suppose to bee behinde the Pillars. The beames aboue the Arches which beare vp the Chamber aboue, you may well guesse, although I write not particularly thereof: I haue not like wise set the Bales nor the Capitals upon these Pillars, because they shold not darken them to much; but in another place I will all entreat therof.

The second Booke.

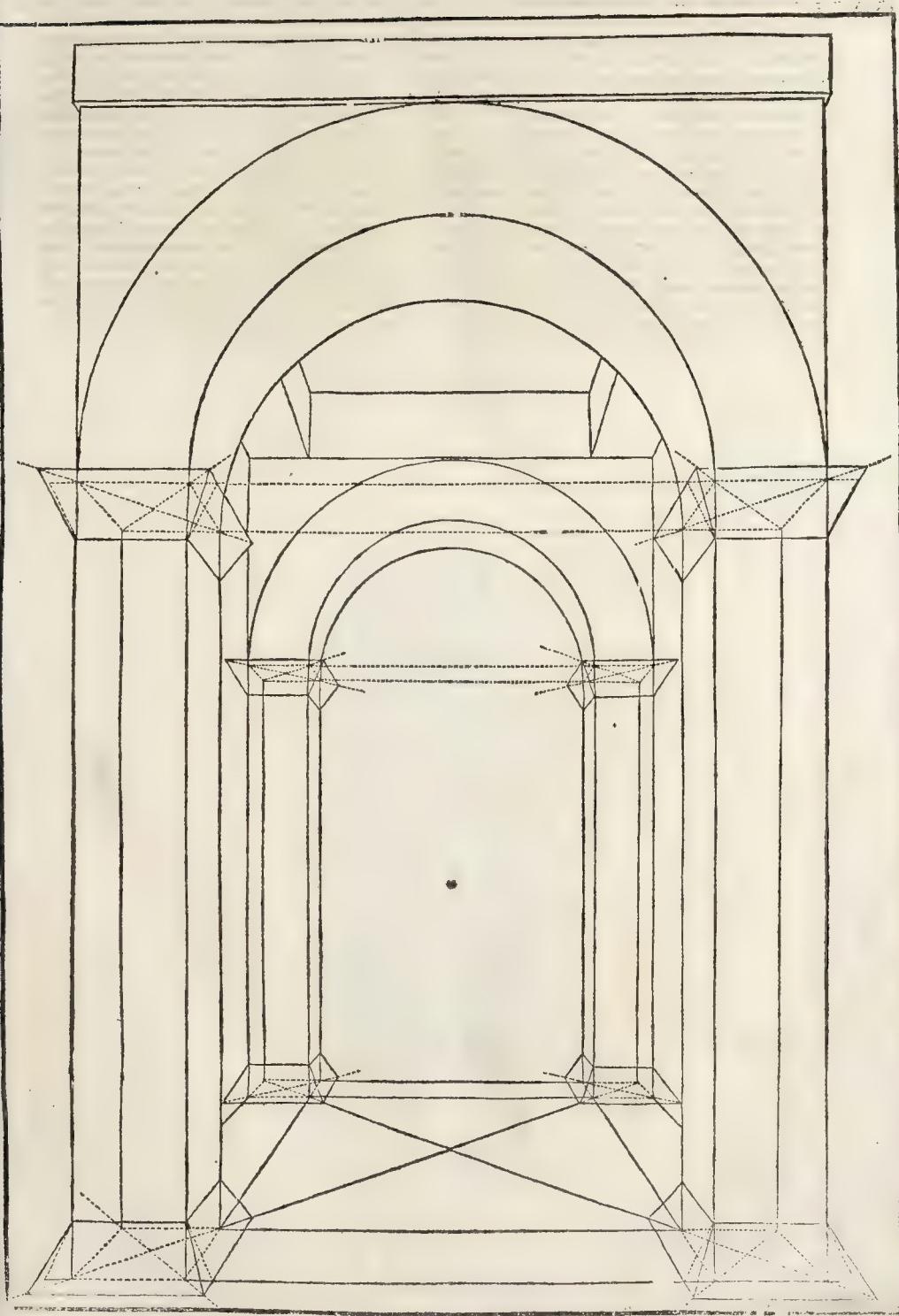
The third Chapter. Fol. 10.



Of Perspective

Thus two Bowes or Arches are enely made to know how to joyn their Bases and Capitals to them, whereof in the severall places I haue spaken before, and shewed how they rise on the one side, and fall or decrease in sight on the other side; that a man may the better learne how to doe them: for in truthe, if a man could shew it unto you in effect, you woulde the easlyer understand it; butto set it downe in writing or Figures as I doe, that men heereafter might know and learne them: it is requisite to entreat of them more at large, and that you may the better discerne and perceiue the pointes of the thinnes of the other pointes or corners of the blache lines; therefore here I haue placed the point of the distances and the Horizon doorenward; and haue placed the Pillars in other manner upon this ground without Quadrant stones: In this manner set the breadth of the two first Pillars upon the Base of such thickenesse as you will, and draw them inwards, towards the Horizon, then you must imagine the distances, as I haue already taught you: and these distances are set on both sides, and on eyther point of the distances you must draw a line both toward the right and left point or corner of each Pillar.

These Diagonall lines will not enely shew you the thickenesse of the first or formost Pillars when they shoulen, but also the thickenesse of the two other Pillars which stand inward, whiche are all marked with paces (and as I haue likewise said before) that which is here said of the Bases of the Pillars, the same also must be vnderstood byward of the Capitals: touching the thickenesse of the bowes or Arches vnderneath, I haue shewed in the Figure before, how you must place the Center in the middle of the fourre crose point lines, to draw the halfe Circumference: The fourre square or Quadrant above, is as great as that below on the ground; I need not shew how you shall make it, for see it plaine enough in the Figure.

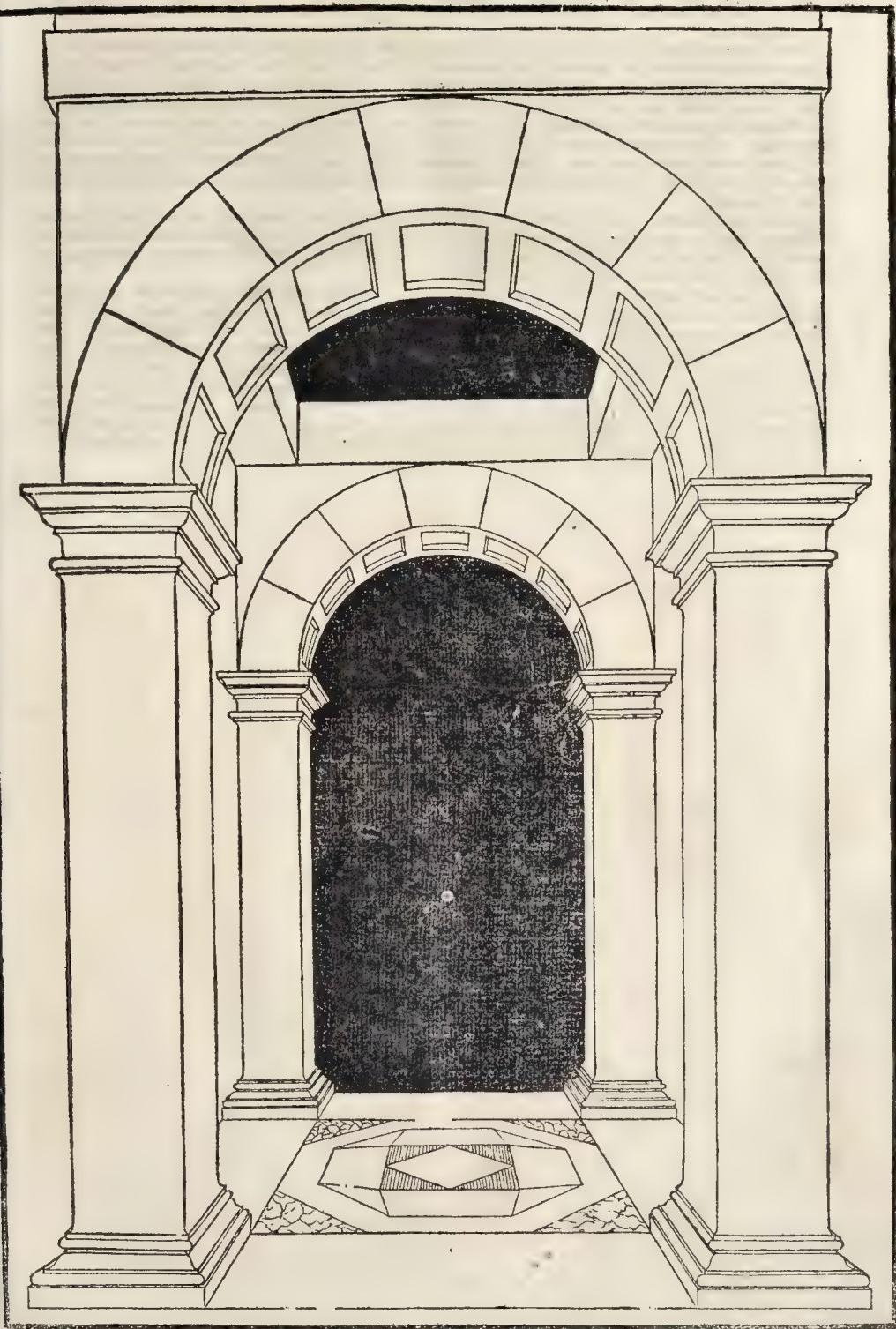


Of Perspective

This Figure is like the former; onely that the members of the Bases and Capitals are added thereto; thereby to make it more perfect unto you, and to shew you how a thing will stand when it is full made and finished, al though I haue shewed it before; nevertheless, when a man is perfect herein, then he may by practise helpe himselfe well enough without all this labour, vseing discretion and bearing in memorie that, which he hath imprinted in his mind: For in truthe, by this means (I meant the ground) a man may by practise make many things; which if they be made with discretion, and by a workeman, will always beautifie the worke, as these bowes or Arches do, which under be deuided with Quadrantes as you may set them. There are, as you know, ffe two Centers to forme the Arch vnderneath; now a wise workeman must not alwayes setke for the perfection of the edge of these Quadrants; but for example, say that the Arch vnderneath is deuided into eight parts, wherof one shall be for the Quadrant, and two parts for the edge or border that runneth about it; now you must deuide the space between the one Center and the other, also in eight parts, but they must shorten or lessen a little, that is, the nearer part against the upper; & then the compasse being set somewhat lower, and made narrower: then you must draw the uppermost border, and then the compasse being set a little below the nearermost Center; you must likewise so drawe the other edge or border: after, you must square or deuide the Quadrants, leaving the space betwixne both, once so broad againe as the other, which must be drawen vp toward the Horizon; and as much as you will make the Quadrant sinke: you must also draw out of the last Center with the Compasse. And in this manner a man may make divers formes and compartmentes (but as I haue said) you must make them all with judgement, and therefore it is very conuenient that a man shoulde be well instructed therein; for that being onely the principall terminations, you must make the rest by practise: But I am of opinion, that some rigorous Perspective men will take hold of these my words, (to whom I answere) that if they meant I haue failed or done amisse, let them proue what difference there is betwixne saying and doing.

The second Booke.

The third Chapter. Fol. 12.



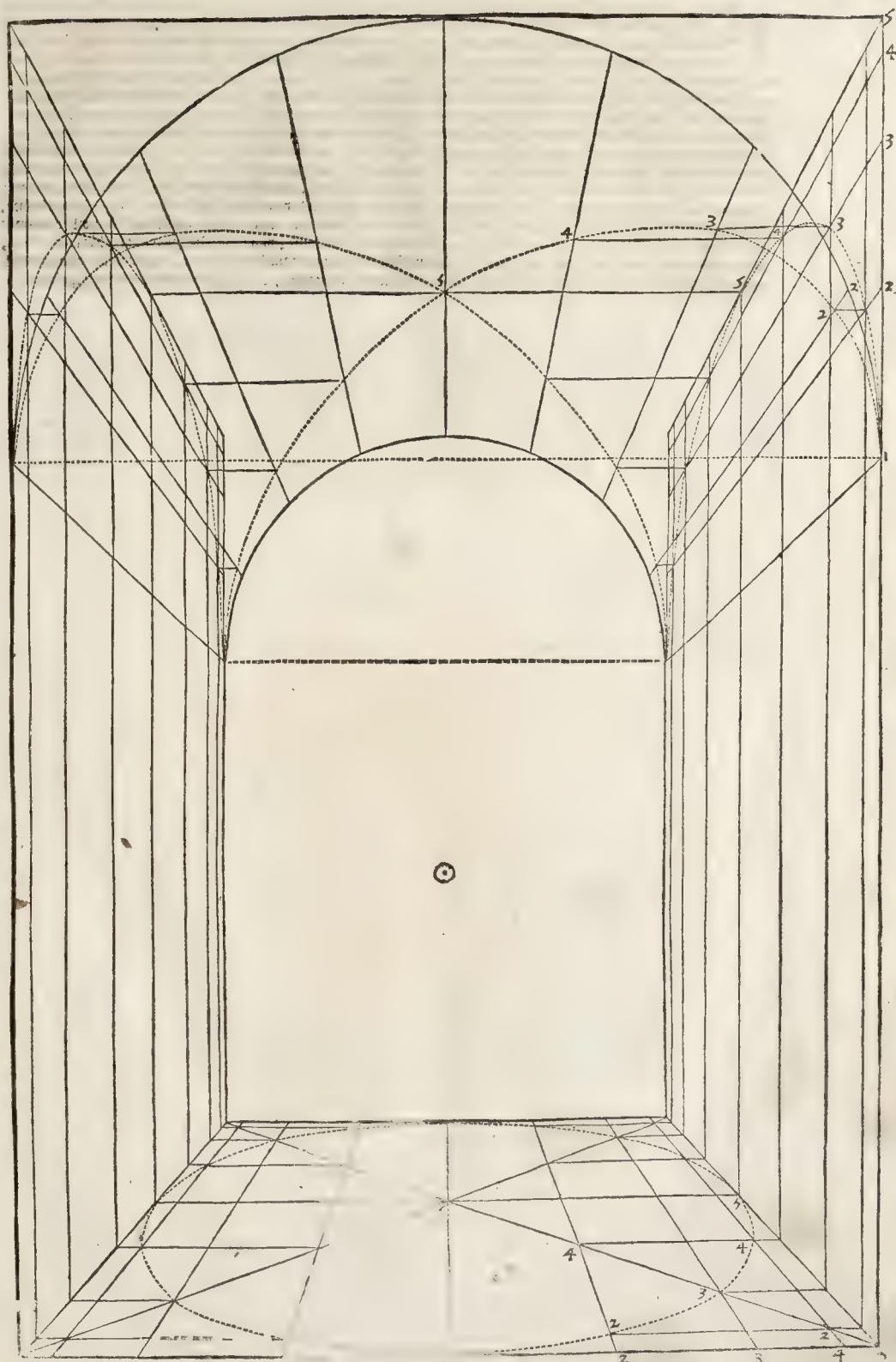
Of Perspective

The manner how to make a croste rose of a Gallery or House in Perspective worke , is alwayes very troublous to shew it unto any man; and therefore also, it is muchmore troublesome to declare it in writing for men hereafter to understand it. Neuerthelesse, because it is very necessary to be knowne, I will doe the best I can to shew it.

First, you must chuse the breadth and height of the greatest Arch or Bow that you desire to make, and then by the distances you must make a perfect shortening Quadrant, and also a lesse Bow or Arch. The greatest Arch before halbe deuided into eight equal parts, and those parts must be drawn towards the Horizon to the smale Arch , which being done, then you must set those parts of the greatest Arche below upon the Base ; and with the helpe of the Horizontal and Diagonal lines, you may make a shortening Circle within the Quadrant, as in the other places before you haue bene taught. The terminations hereof shall be 1.2.3.4.5. which shall be set vpwards beside the great Arche, as you see it there also marked with 1.2.3.4.5. Without this round below I haue drawn the Paralels with prickes to the wall, and where they end, there you must set all your Perpendicular lines upright, which are come out of the Paralellines of this Circle.

Then you must draw the terminations aforesayd, which are placed above, along by the Perpendicular lines with lines to the Horizon; and where the said Horizontal lines cut through the Perpendicular lines, which are drawn vp from below; there you must make halfe a shortening Circle: and that which is marked on this side with Ciphers, must also be understood to stand on the other, as you see it in the Figure.

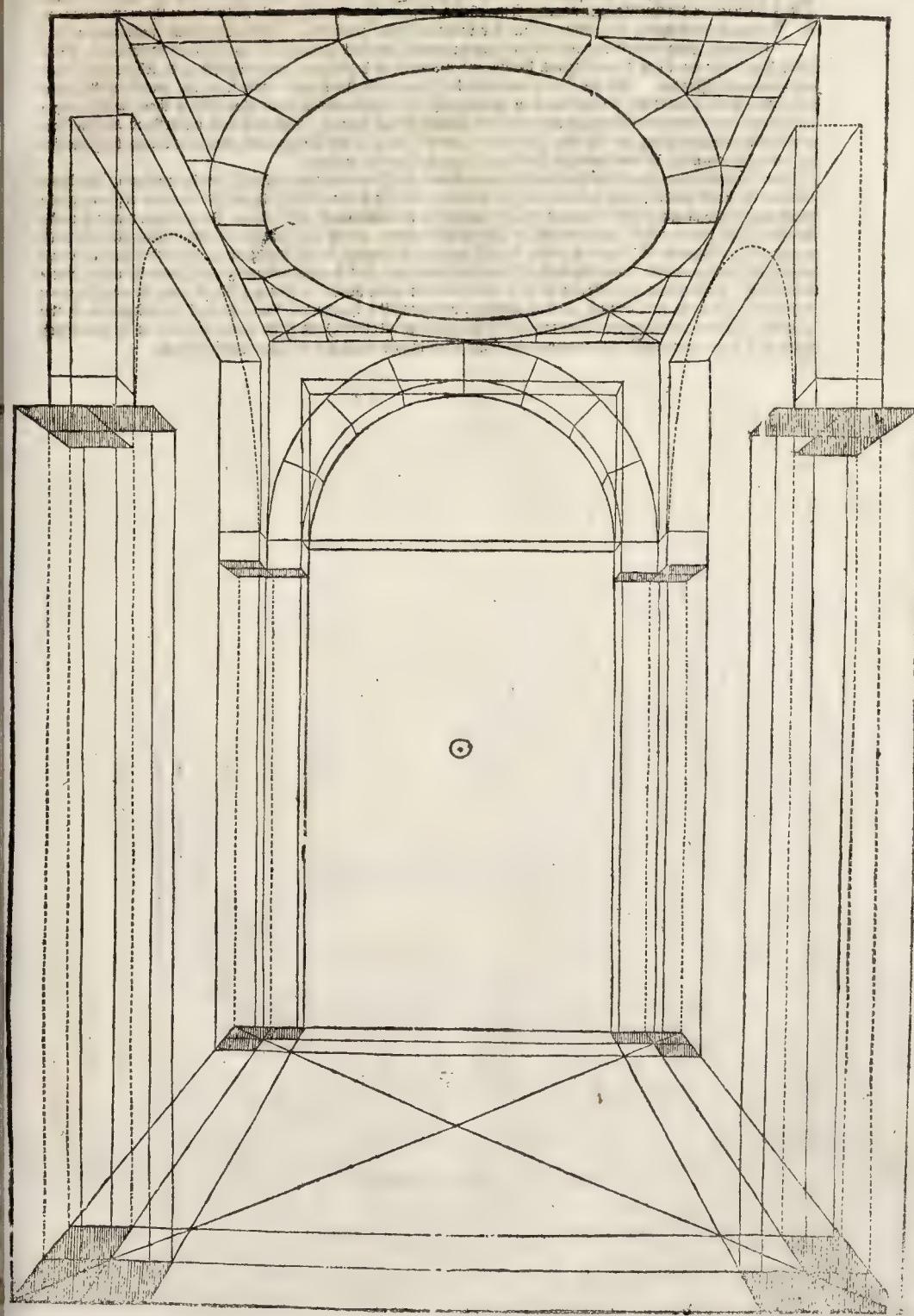
These two halfe shortening Circles being made, then you must draw a right blacke line abone out of each of the middles, which are marked 5. and where that cutteth syongh the middlemest line, which goeth from the greatest Arch to the Horizon, there shalbe the terminations + also the middle of the croste worke; and then out of all the terminations of the two halfe Circles, you must draw croste lines on the sides, and where every one of them following an Horizontal, toucheth the Arch marked with 2.3.4. there the terminations shall stand to forme the halfe Circles in the croste, through the which a man with a stedfast hand from terminatyon to terminatyon shalmake a shortening halfe rounde croste with prickes, as both on the right and left hand you may plainly see in the Figure. In this manner the worke shal goe, although it stand somewhat out at the sides; but it is better first to paint it well in your memroy, before you seeke an oþer forme where the Horizon standeth on the one side, that then you may the easlyer make that which is shewn on that side.



Of Perspective

Having shewed in crossewooke on both sides, how you should place the Arches on the sides in shortening manner
And draine them vp out of the ground, although that they be single: now will I shew you a hollow Arch, and
the maner how to shorten it. But before I proceed thereto (for it is very combersome and difficult) first I wil
shew you the Pilasters that shoulde carrie the sayd Arches: whiche Pilasters stand so plainly in the Figure
that I shall not need to take much paines to wryte of them. In this Figure I haue not made the firme Arch, that I
might not darken the sight of the Arches on the sides, whiche Arches on the sides, I haue also but marked how they shall
stand, and are alwayes draine out of the foursquare Quadrant, as you se by the order of the foursquare Quadrant,
but the hindermost Arch which standeth not in the way, I haue draine fully, and placed it also in his foursquare.

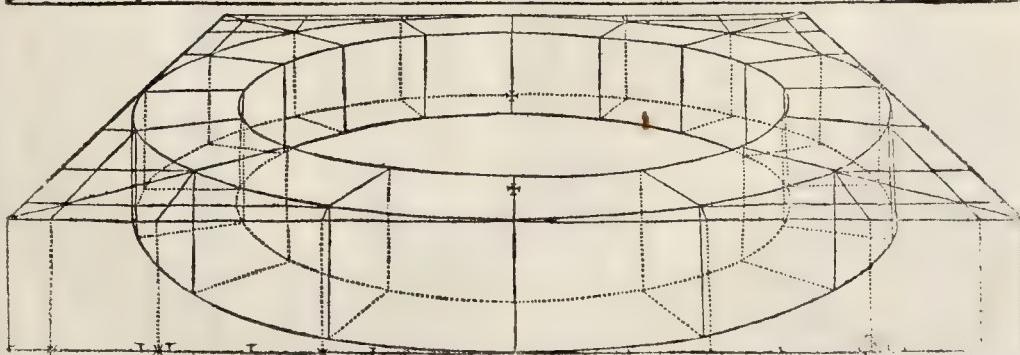
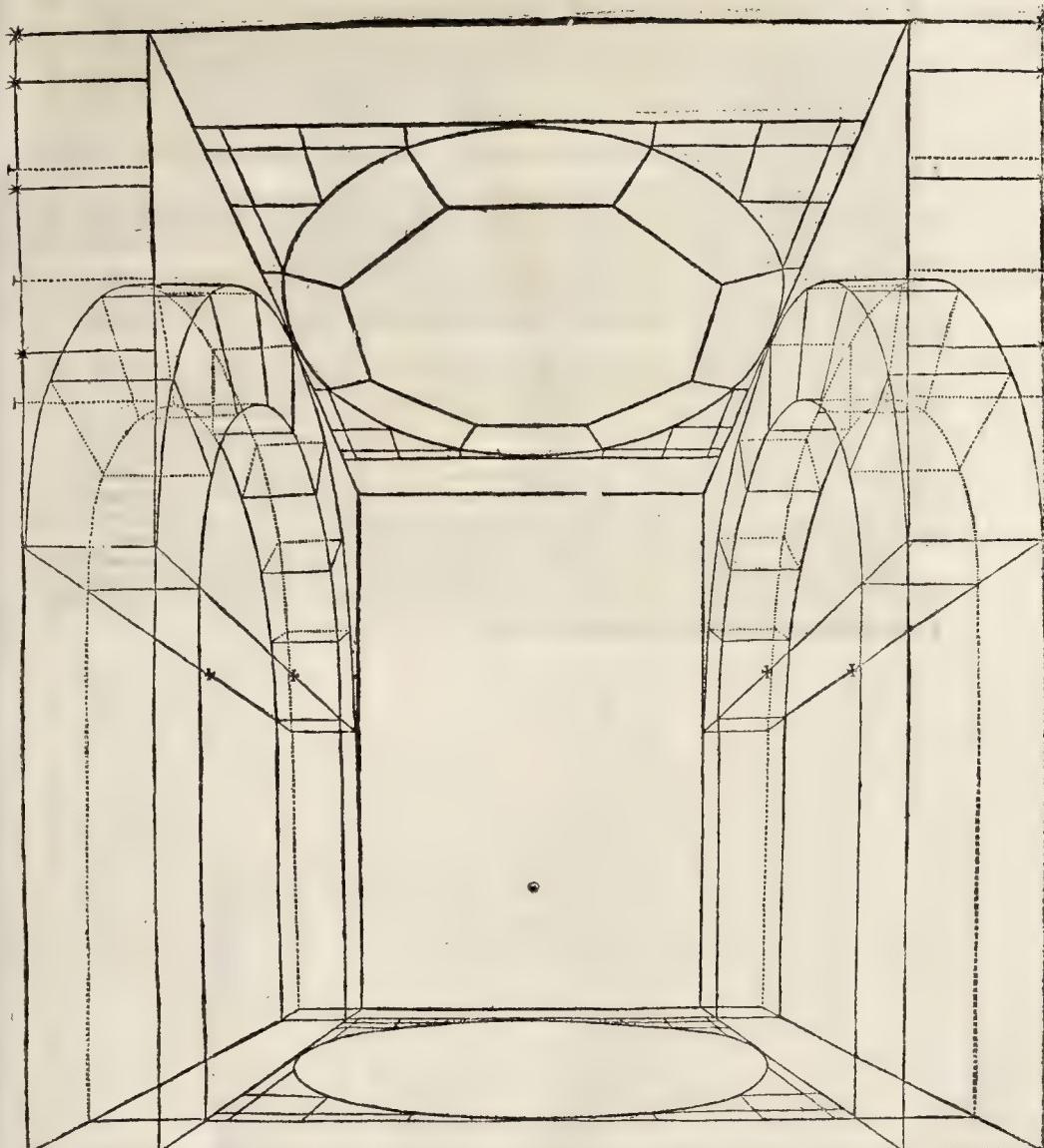
Above in the top or rofe, I haue made the round forme, whereof you may make a Kettell or Tribunall; and you may
also make it thus, when it is some what soncke. Touching the foursquare Pilasters, they (as I haue taught before) are
found by the Diagonall lines comming from the point of the distancies, and also that each Pilaster is thise cornerd:
standing like a thre cornerd hooke, and on each end (the Arch resteth whereof there shall be four) two Arches before,
and two on the sides, so that the rofe will be right foursquare, wherein you may make crosse wroke or other manner
of Roofe wroke. And if you will make other kordes of works by the same; you must alwayes follow this rule: Item,
where you can not well understand my writing, you must helpe your selfe with the figures, which figure also standeth
open, so that with a little labour, a man may easly conceane it altogether, although there were nothing spoken of it.



Of Perspective

Now you se, what way you must follow to place Arches on the sides in shortening manner: And first, you must thinke upon the third former manner Superficies, wherein I have sufficiently shewed you the manner how to frame a round body; but in this Figure I will shew it more perfectly. Wherefore a man must imagine that the round Body lying below it his foursesquare is made, and shall serve for the two Bowes on the sides. This Body then being made (as I have shewed before) and as you see it better now, you must first set it, where the Arches begin about the Horizon. And the same Perpendiculer lines whiche stand corner wise from the middle of the fourre cornerd body, must be set like Parallel lines on the right & left sides upwards from the two Arches, there (at it is aforesaid) to direct the Horisontall lines, as you may see it plainly in the Figure. But you must understand, that the two croises below in this Body, are the two Centers to draw the stones of the Arches both above and below, they also signifie the Centers of the Bowes upon the Horisontall lines within the Arches.

You must also understand, that the blacke lines do forme the Circumference without, and the prickes or thin lines between the forme within, which is couered in the Arches: so that the Arches do shew through to be made of pieces, of the which pieces a man may learne to make divers Compartmentes underneath in the Arch. Now when a man can make this Arch well, then hee shall not neede still to take all this labour, but by two principall lines helping himselfe with prickes, he may frame the Arch; and specially, because that the Arch which shoulde come before, couereth or hideth a great part of the Arches on both sides: which Arch I haue not made here, that I might not darken or shadow the other shortening Arch. Neither need I wryte any thing of the Circumferences above in the top of Roofe, (nor the eight corners within) for that in the next Figure you shall se them; neither will I speake any thing of the Circumferences in the ground, for they are made (as I haue taught you heretofore of all others) and of the round body below (of the which there ha' beene more sayd) a man may make many other things which are not here to be spoken of.



Of Perspective

To place Pillars w^t their Arches upon grounds or platformes, I thinke there is sufficient spoken before; and what corner I have spoken of four square Pillars, is also to bee understood of round Columnnes, for that a man must take all round things, out of four square things as well the Spira of the Hale, as the round of the Capital. He that can make all the Figures aforesaid perfectly, and particularly this last body, shall helpe himselfe well, and not only to doe the like thinge, but also to do many more. If I shoulde in this small Treatise shew all that I could set downe, it would make a most great Volume; and peraduenture I shoulde want time to set forth the rest of my Booke, which I haue already promised; for there are many things that belong to Building, which need not to bee set downe in Perspective worke.

Let vs now begin to rayse the Building here set downe out of the ground, which before, and at the one side is saue, as I promised before to shew you.

The shorkest and surest way is, to mak a ground with many Quadrants; and imagine that it is mete with the Foot, with the Elle, or other meaure: But let vs now take every Quadrant for two foot, and as before there are four Quadrants from one Pillar to the other; and the Pillar also containeth a Quadrant, there shall also be four Quadrants by Ward in the length from one Pillar to the other, as you may see it altogether in the Figure.

The Pillars then being set of such height as you desire, then the Arches vpon them must be made; and the manner how to make them, you may expely see in the Figure. And althoough you cannot see the Arches that are behind them, yet I haue made them here that you may see their terminations: they are in some places drawn with full blacke lines, and in some places with prickes.

Above the Arches you must make the Architrave, Frise and Cornice; the Projecture whereof, you must make as I haue sayd and taught heretofore, that is, how they make their corners against the two Diagonall lines, and by the like rule you shall also make the uppermost Cornice, as you may see in the uppermost part, where the small Quadrants with the Diagonall lines stand. The doores that stand vnder in the Gallery, are each of them two Quadrants broad, and four Quadrants high: below in the ground there are certaine tokenes which shew like Hayles, which signifie the wydenesse of the windowes above the Cornice: which windowes if they stood whole there, then they wold be twice as high as they are broad. The other Hayles hysydards betwene the shortening Pillars, are also the breadth of the shortening Pillars, which (as I sayd before) are all four Quadrants high, but they are partly covered with the Cornices. The part of the Arch which standeth at the ende, is separated from this Gallery, as the ground also heveth it.

I haue here made no Basals nor Capitals, that the other things might not bee confounded: but you must vnderstand that they must be placed in the wchke, as is sufficiently before shewed. And by this rule you may draw divers Buildings out of the ground, as in the Figure following shall be shewed in divers sortes. The Centers of the Arches you see them marked, standing all vpon one Horizontall line.

The second Booke.

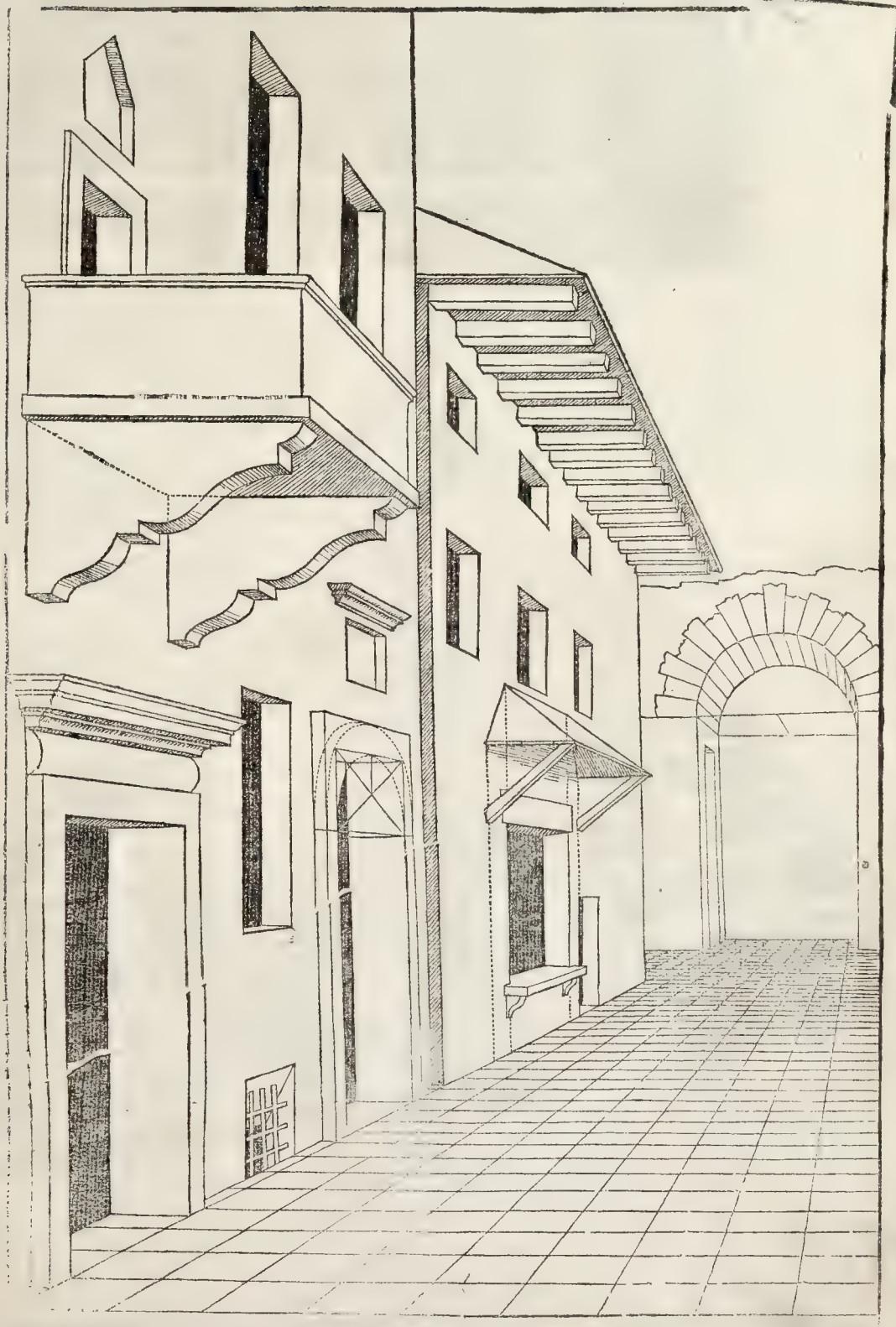
The third Chapter, Fol. 16



Of Perspective

NON I have set downe the manner how to make a Gallery with Arches and Pillars, with other things thereto belonging; now by an easier way I will shew some forme of houses that are to be built out of the ground. You must make a ground or scote wiche with Quadrants reaching long enough vpwards, which Quadrants must each of them be reckoned at two foote square.

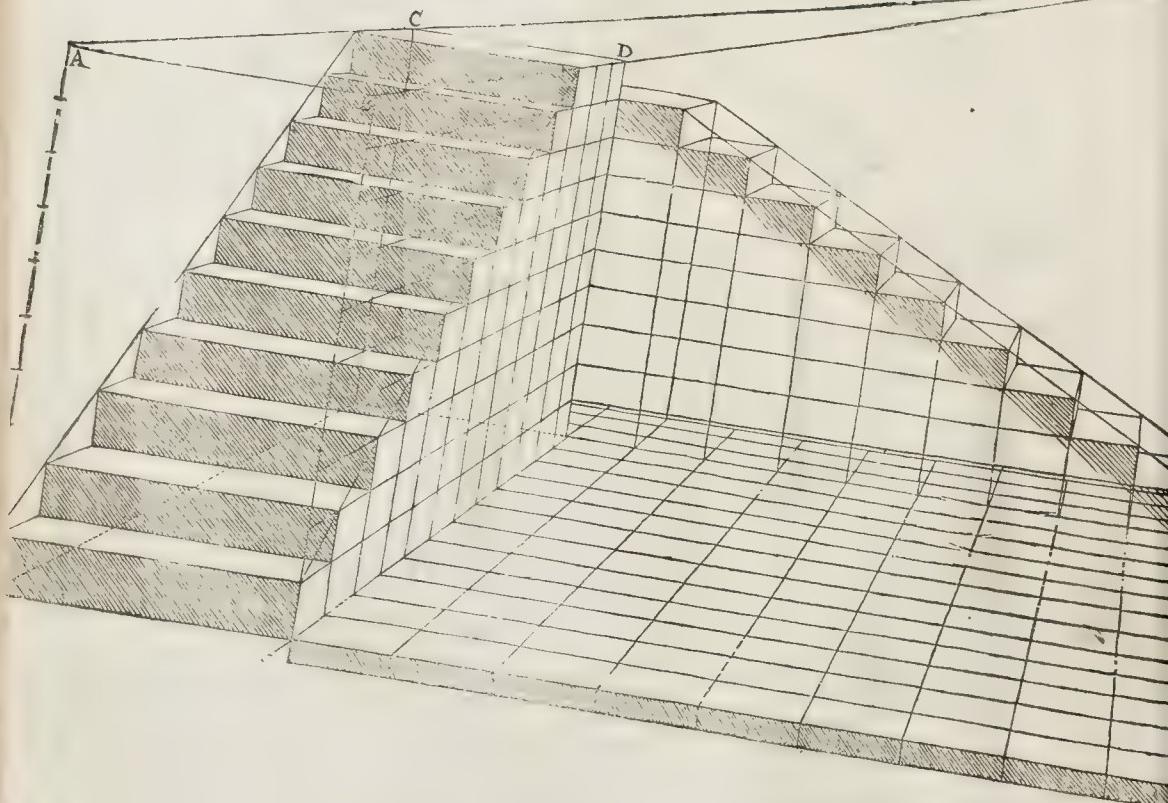
And full, at the entry of the house there shall be a doore of five foote broad, so that it containeth two Quadrants and a halfe in the flōtēning: and the heighth thereof shall be of tenfoote, because it is five Quadrants high: Her Pilasters or Antipagimentum shall bee a foote broad, because they containe a halfe shortening Quadrant; the Frise shall also containe as much: and the Cōrante shall containe so much lesse, as the vnder part thereof bearing ouer containeth, and shall be made according to the rule aforeshowen. Touching the part ietting ouer the doore, the Degdiones or Mutilles, shall stand right above the Pilasters or Antipagimentum of the doore. And that little doore upon the ietting, shall stand right in the middle above the lowell doore, and shall be two foote broad. In the other corner of this first house, there shall be another doore, the iudecnesse thereof shall be sixe foote; you may make it round or square aboue as you wil. But why doe I spend my time to set downe all these meausures, which you maye plainly see in the Figure; onely it is necessary to waite such as are knawen heren, that what wozke souer a man rayleth out of the ground, consisteth in three principall things, that is, in length, breadth and heighth. The length is of certaine houses or rooms, containing a certaine number of feet. The breadth consisteth of Windows, Dōres, Gates, Shoppes, and such like things. The heighth consisteth of Postes, Windewes, Jettings, Cōrantes, Columnes, Rooftes, and such like things. But there is yet another, that is of the hightenesse of the Wallles, Pillars, Columnes and Pilasters: The length is taken from the shortening Quadrants, and from thence alle you take the breadth. But the heights taken out of the breadth in the Quadrants, which breadth shall be taken from the Quadrant or halfe Quadrant, which toucheth it on the highermost side as it standeth: as also from the highermost doore, which is ten foote high, there you must take the meausure from the Quadrants, which come to the railles on the nethermost corner or point of the doore; so if there you take five Quadrants in breadth, it shall be height within the Antipagimentum. And that which I haue sayd of these doores, you must also understand of all the other things: The thickenesse of the Wall is two foote, for you see it containeth a Quadrant. The bearing ouer of the second house is of sixe foote, measured vpon the ground: the like also the bearing ouer of ietting of the first house containeth. To conclude all things, as I haue said, rising out of the ground on all sides, I haue set no Cōrantes, nor any other ornaments in this Figure, that you may the easier understand it; but a man of ripe iugement and understanding knowing the terminations, can by his owne iuention helpe himselfe to make faire buildings. And so that I may not spēnd too much time herein, I will make others to give you more light therein.



Of Perspective

THIS STAPLES, degrés or goings by, are very necessary in Buildings, and therfore I will shew divers kinds thereof, and first I will begin with the easeli. According to common custome a Stappe or step is about halfe a foote high, and about a foote broad vpon the step; then let the square lones of this ground be a foote square, there with we will make a paire of Staires of iuste foote high, and thre foote broad: at the foote of the ground we will take the measure of the bredth, whiche both on the right and left sides shall be set in Perpendiculer lines on the Cozners of the Staples, which shall be deuided into ten, as the lines A. B. shew you. Then all the parts of A. B. shall be raised to the Horizon, and then you shall take nine Quadrantes bywards in length: and where as two lines are set by cutting through the Horizontal lines of A. B. there the corners D. C. of the huyermost steps shalbe, containing a foote square of thre Quadrantes on each side. From the hithermost points of the same uppersteps, you shal draw two holding lines to the lowest steps; against the which the Horizontal and the Perpendiculer lines of the Quadrant shall come together and shal by the Staples.

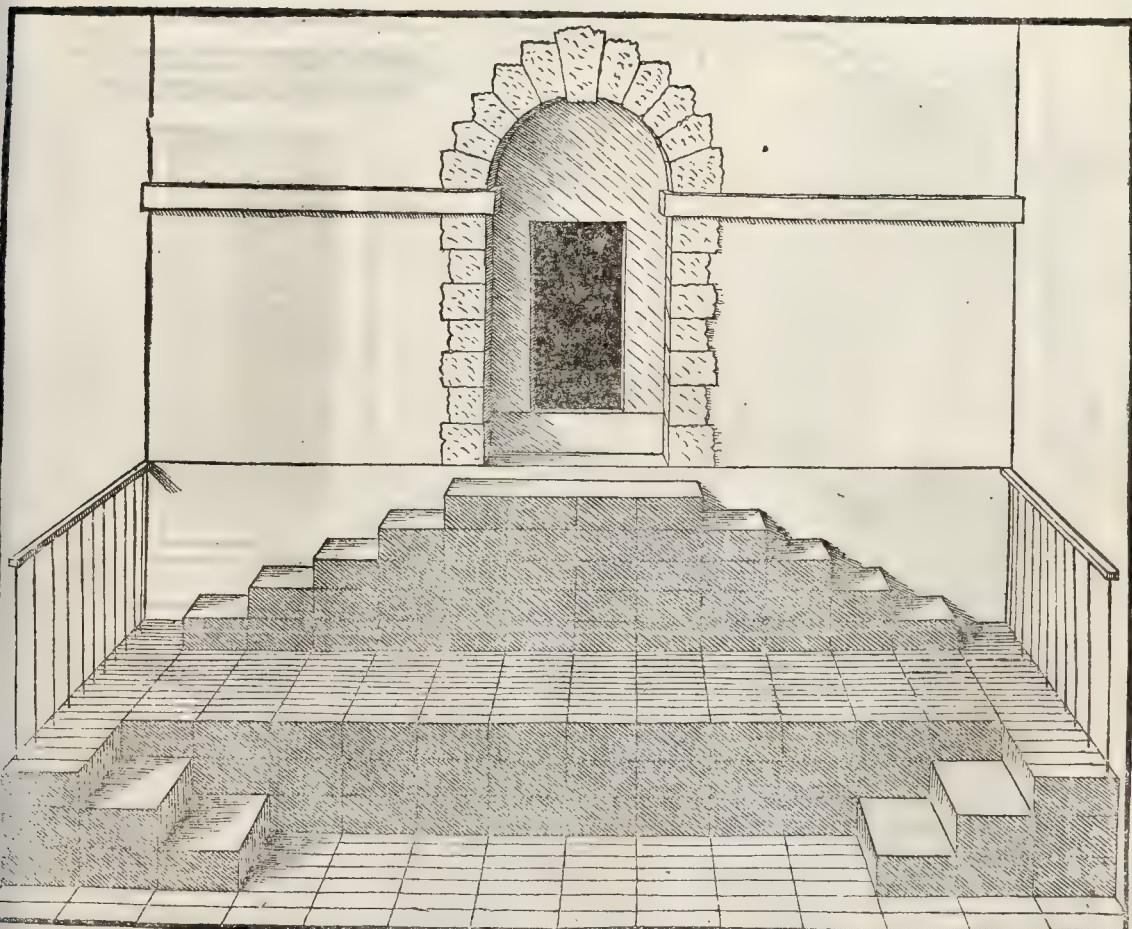
These Staples are shouened on the one side, and the other is plaine or profil, and containeth a step lesse in the height, whiche maketh fourte foote and a halfe; it is also thre foote broad, as it is marked vnder it on the ground. By this rule you may make Staples or degrés as high as you will, and make some resting places in the way: alwayes taking the measure from the foote of the ground, as well of the shouening, as of those that are upright.



The second Booke.

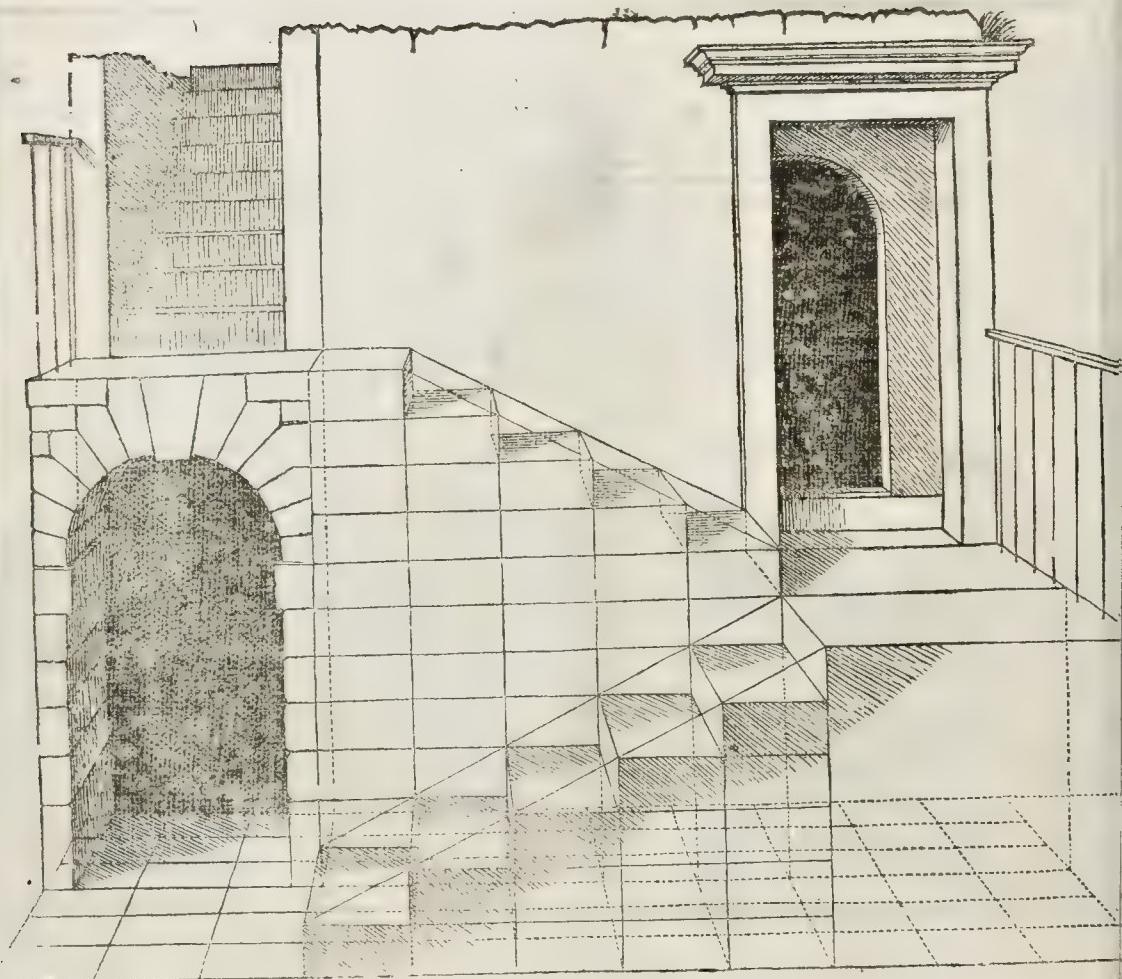
The third Chapter, Fol. 18.

The going vp being plaine or proff makes a great shew, and yet are very easie to set in all places, I meane in the turning, and may serue for many things, specially in Buildings, where a man going vp softly and with ease, giueth the beholders a kinde of pleasure to view them, principally in common places, for that there is a going vp on either side, so that upon the one side men may goe vp, and on the other side they may goe downe; and although there are only but two goings vp, yet by this a man by his own invention may devise others. Now these Staires are made, and with what reason, you may by the Figure perceave them, although I shoulde say nothing thereof: for as it is sayd before, the Quadrant's arc of a foote broad, and the Stepshalle a foote high, and so the breadth of the step is one foote. The breadth of the Staires is five foote, both the first and second: The resting gate containeth in widenesse thre feete, and is five foote high: which although it seemeth to be shut, and a small doore opening in it: yet it may be made whole open and otherwise closed. The two sides above the thre steps are five foote broad, although here it is but one foote, because of the narrownesse of the paper. The Perpendicular lines on the sides, signifie leaning places, and they shoule serue well also to the steps, but less they shoule comber the wozke, I haue left them out.

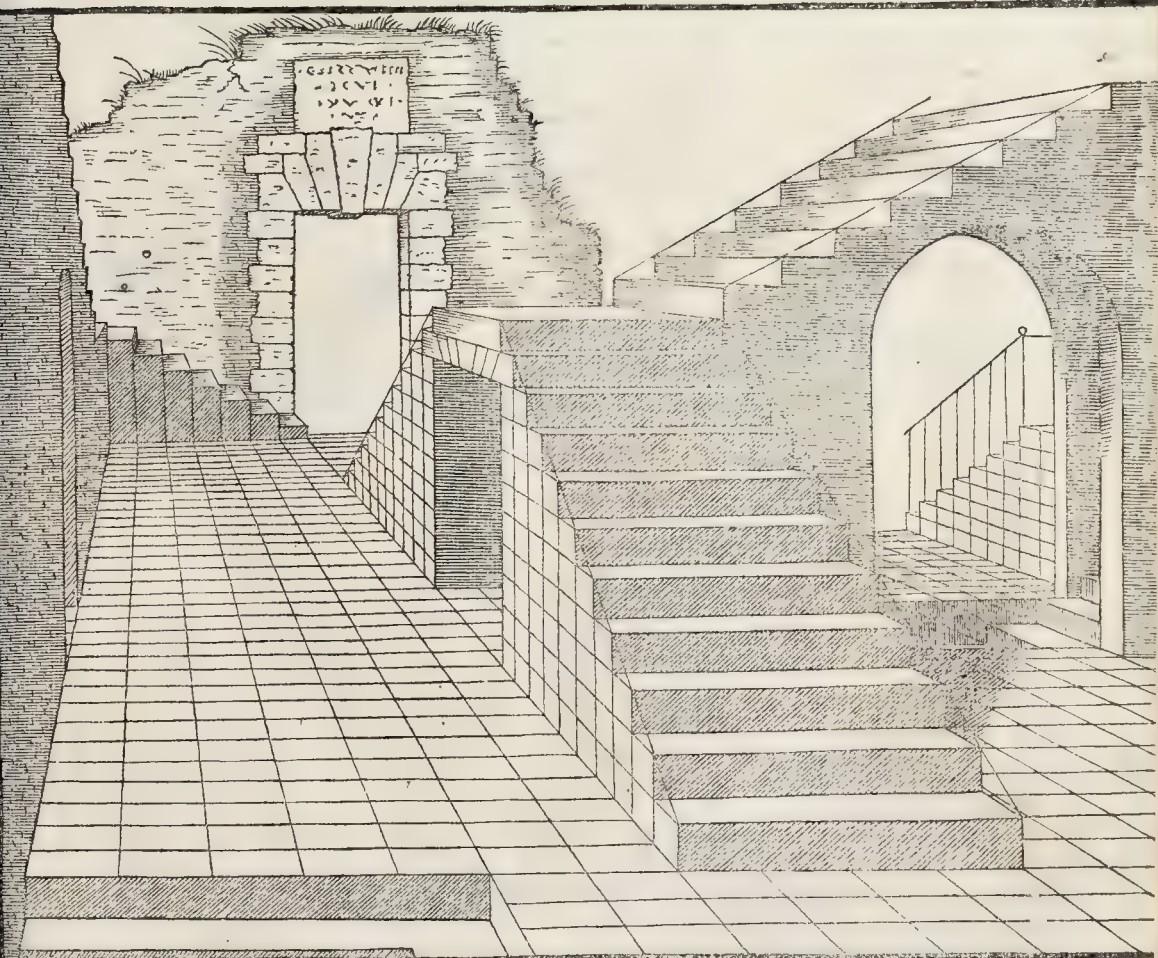


Of Perspective

Amongst other things which shew well in Perspective worke, I finde that goings vp or steps are very seemly, and the other that they turne, the better they shew; therefore I haue made these two goings vp turning, which stand in profit, yet vouldest thou haue the ground and the steps. This first going vp is shee foote high and therc foote broad, as you may see it marked in the ground with pickes: the resting place betwene the first and second going vp, is two foote squares long, whiche is necessary, because of the turning. At the end therof you finde a Portale, the doore thereto is two foote iuope, the Antipagmentum is halfe a foote on eyther side, so that the place is therc foote full. The Perpendicular lines on the right side of the plane, signifie certaine leanings, which may bee made of Iron, Wood, or Stone; the like may be made along the Staires both upward and downward, setting a Baluster upon every Steppe: The height of this raille or leaning, shall be two foote and an halfe; so that it is easie to lay a mans hand vpon. Now these Staires are made vpwards out of the ground, although it may well be scene by the Figure without declaring it: yet I will say some thing thereof, to ease them that are short of memory. The resting gate or round doore under the plaineesse betwene the second and the third going vp, is no deeper then to the wall: Above the same doore there standeth another going vp, of foure steps, whiche to make, I haue sufficiently shewed; otherwise a man shoulde continue the ground at the resting doore, to draw them vp from it.



TOUCHING the severall kinds of Stayzes, I am assured that they may partly be understood without describing them in wrytings, and specially the middlemost which goeth up on both sides; and so shall the uppermost also, bcc. as it is raised by from the ground as well as the other, and is six foot broad, as you may see and tell it on the ground upon the plaine stones. The two Arches under the two goings up are each a foot in thickenesse, whereby a going downe is foure footes within, and is also drawen out of the ground as the rest are. The other goings up, which you see through the Arches, you may sufficiently perceiue by them how they are made; and so it is with the two paires of Stayzes on the left hand, for from the first steps at the resting doore, you may easilly se hole they are rapted boord of the ground, and above at the end of them they have a piece of plaine ground to come to the other Stayzes, which also is drawen up out of the paument as the rest are, that is, each step halfe a foot high, and a foote broad. But it is hard to measure in so small things, but it sufficeth that hereby you may see the manner thereof; and when you make them great you shall find that they will come well enough to passe. Under the Stayzes last named, there standeth also a round doore which is five fot wide: upon this ground, and on these Stayzes a cunning Painter might place divers Figures in severall formes, either standing or sitting upon the Stayzes; and lying upon the ground in shortening manner, and that in this wise: You may place the Figures where you will with fete, and then take the fote or squares wheron they stand, and that shal be their height, for that it is the height of a common or ordinary man: this you must observe both before and behinde, and in every place. If the Figure be upon a step, then take the measure of that step wheron it standeth, and make it twelve steps high, which shall be six fote: And is the Figure lying, doe the like; but if it lieth in shortening manner upon the ground, then you must take the length by the shortening Quadrant.



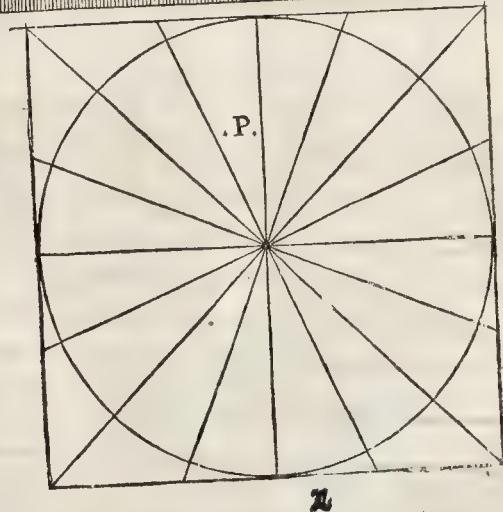
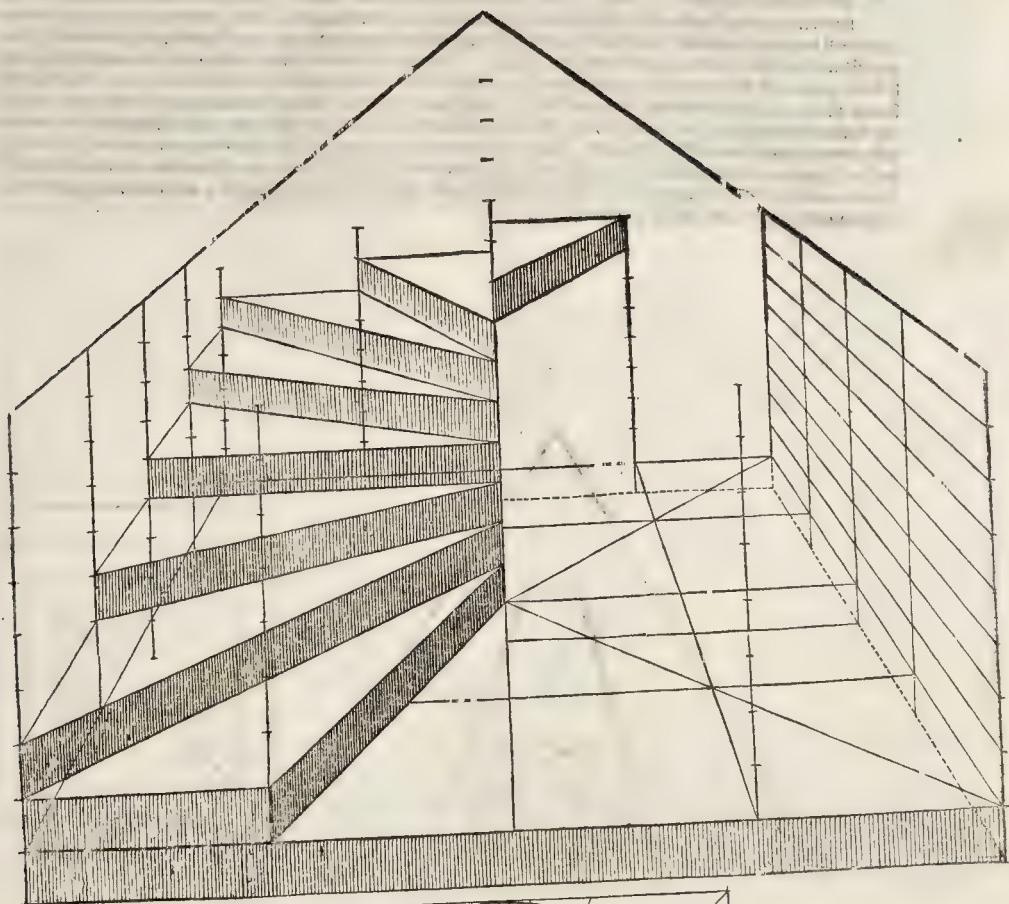
Of Perspective

I have shewed many kinds of goings vp, but there are other kinds, and he that is not well instructed in the former will hardly understand these two which I have here set downe. The first shall be winding Stapes in four square, and he that can make these four square Stapes, may well make the round Stapes, for it is all one thing, specially if he beth the rule before set downe of the round bodies.

The Figure P. is the ground of this winding Stape, but it is much lesse then the uppermost to get ground. This four square ground in shortening you must make halfe a foote high, which shalbe for the first step. Then before at either end, you must make a Perpendiculer line upright, and in it make an maner halfe feet as you desire to make the Stapes high; you must also place the like Perpendiculer lines betwene the middle, & the corners: then you must draw the terminations both on the right and the left sides upwarde to the Horizon, which will cut through the Perpendiculer lines, which are drawn out of the terminations of the steps: and of the same height that the two cornered Perpendiculer lines are: and of the same measure you must make the other two Perpendiculer lines betwene the corners and the middle. Then in the middlemost termination of the ground you must place an other Perpendiculer line, and divide it also in halfe feet, as the other Perpendiculer line on the side is: So out of this Perpendiculer line of the Centers against the next Perpendiculer line beneath on the left hand, you must frame the first step with two lines: The second step you shall also frame and shut vp out of the Perpendiculer line of the Centers in the corner following. Then from that point or corner you must draw a line to the Horizon, which against the second Perpendiculer line will make the termination of the third step, which shall also bee shut above, according to the aforesaid rule: from that point or corner of the step you must also make an Horizontal line, which will touch the termination of the fourth step; which being closed, then you must raise that corner also to the Horizon, and that will shew you the termination of the fifth step. And when that step is also closed with lines: then you must draw the point towards the Horizon, which line will shew you the terminations of the first step against the hindernost Perpendiculer line: and that being also closed vp with lines, then out of the same corner you must draw a Pararel line to the termination of the seventh step, and not towards the Horizon, because it is another line of the four square. Thus you must wozke round about from step to step, always following this rule by the whiche you cannot faile.

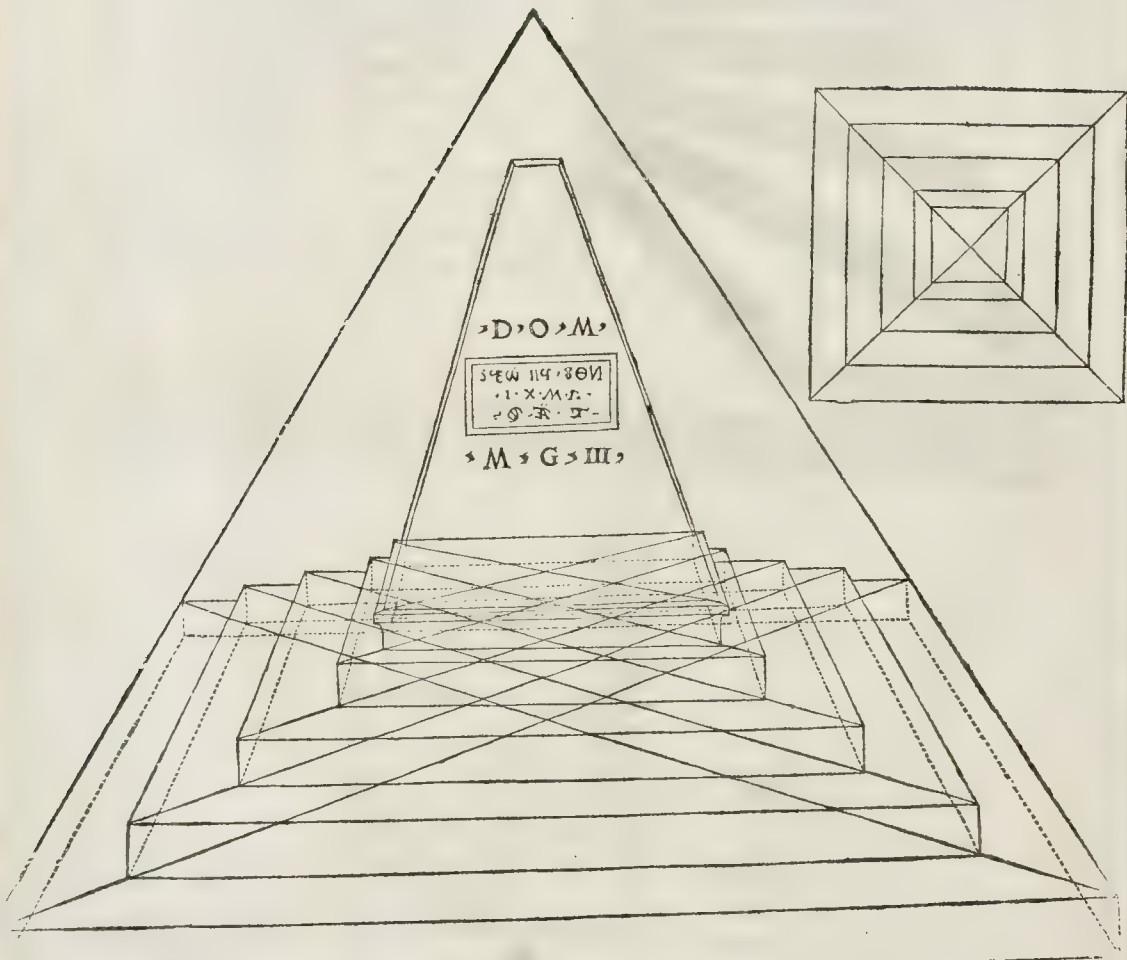
The second Booke.

The third Chapter, Fol. 20.

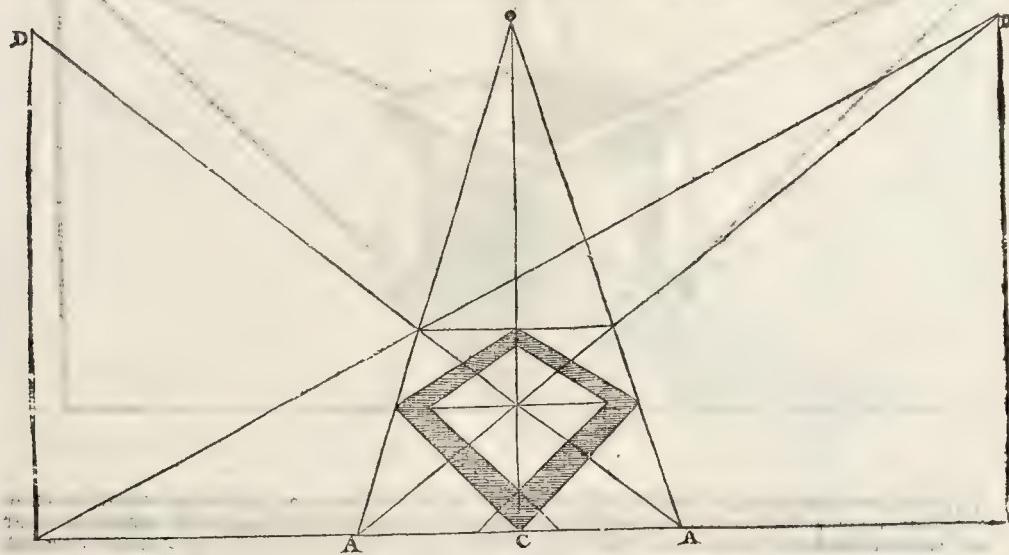


Of Perspective

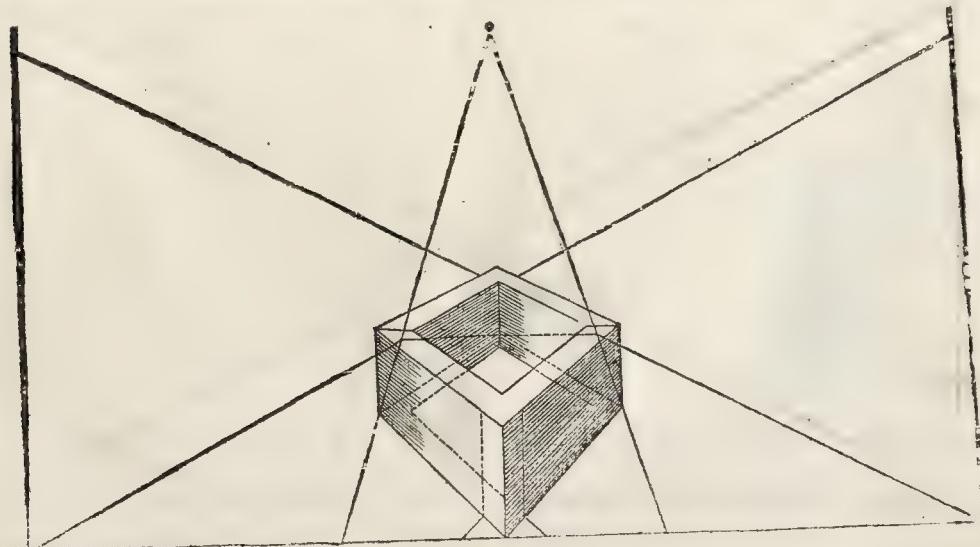
THAT I may not forget to set down all kinds of Staires, and specially such as often times fall out to be made; wherefore I have made these Staires, wherein a man may goe vp on all sides, whereof the ground standeth above on the right hand, but yet very small. These Staires must thus bee made. First, you must make a faire square shortening body of halfe a foot high, vpon this you must draw two Diagonall lines, and from the corner inwards there shall be a foot broad left on either side, and the terminations thereof drawne to the horizon, and from the Diagonall lines you shall see the corners of the second step. Now I need not set downe unto you how you shall finde the lessening corner of the second step, the which is round about shut vp with Parallel and Horizontal lines: then upon the second plane you must draw two Diagonall lines, which doing as I have before will shew you the third step, which also being closed vp with lines, you shall also find the fourth and fift, with the like rules: This Piramides is fantastically framed vpon them to fill vp the place. Also I need not set down to what uses these Staires may serue, for that the halfe of them is commonly found in divers pieces of woake, as the gates of Pallaces, Churches, and other dwelling Housles, and the ascending vp to Altars: By this way also you may make round Staires, and also Staires of six or eight corners, as by their formes I have shewed.



I haue promised the studious Reader by this my labour to shew as much touching Perspective worke, as I can; that hee might he wchis concerne touching Housis or Buildings in Perspective wise, meaning to set downe some simple maners thereof, as if he should forme a single or double ground, thereupon to rayle a body, and therewith meane to make an end. But falling from one worke to another, I am entred into a Labyrinth; which peraduenture is to farre aboue my reach: which commeth to passe by meanes of some men that haue entreated me therunto. And therefore, as I thought at this time to make an end of my second Booke, I begin to handle a harder matter, whiche rule is onely called an outward fourre square: nevertheless, it is a well drawne by the Horizon as by the distances, as you may see in the Figure following; which sheweth a right shortening fourre square, containing in it another fourre square, the whiche also may bee forme by the distances without Horizon: some men place the sides of the fourre square vpon the Base, once so wpoen againe as before. And as you see two like sides of the fourre square ouer the corner, so are the distances alike marked D. And as much more as you will haue this fourre square to shozten, so much you must draw the distances from the Horizon; and as much as you will that the edges of the fourre square shall be broad, so many breedthes must you draw vpon the Base, betwene A. C. twice drawne. All the terminations of this fourre square standing above the corners goe all to the distances, and none to the Horizon, but onely the fourre square that is set therein.

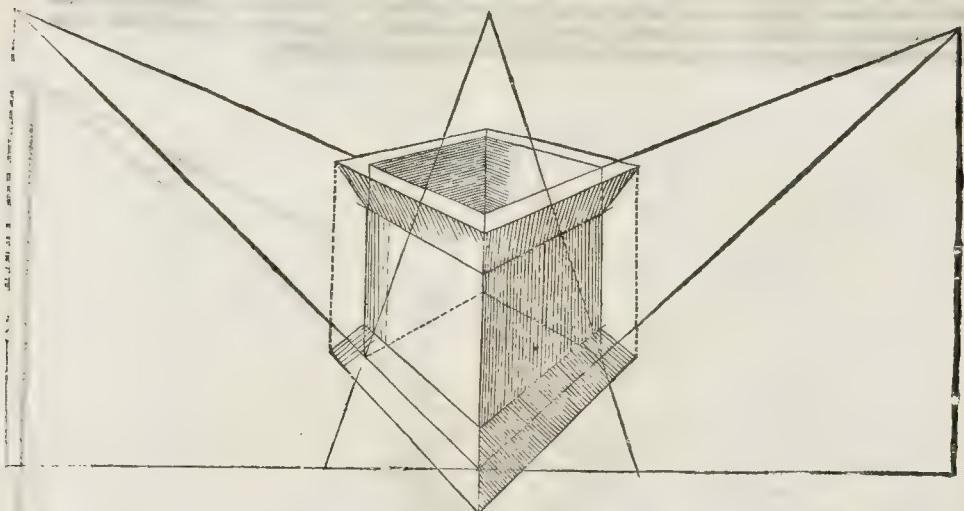


Now I haue shewed, how you shold shozten a Superficies, overpoynit or outward fourre square: here I will shew how to intrasse or bearre out the body thereof with the same Horizon and distances also, which body within is hollow, and you may heare it vp as high as you: but I haue purposely left it somewhat lowe, that you might see the ground thereof. And by this Figure you may conceare to how many things this may serve: and also how you may increase or diminish it, according to skill and judgement. This shall suffice for these fourre square modells or hollow things: but I will shew how you shall make them to Crests or Teynices.

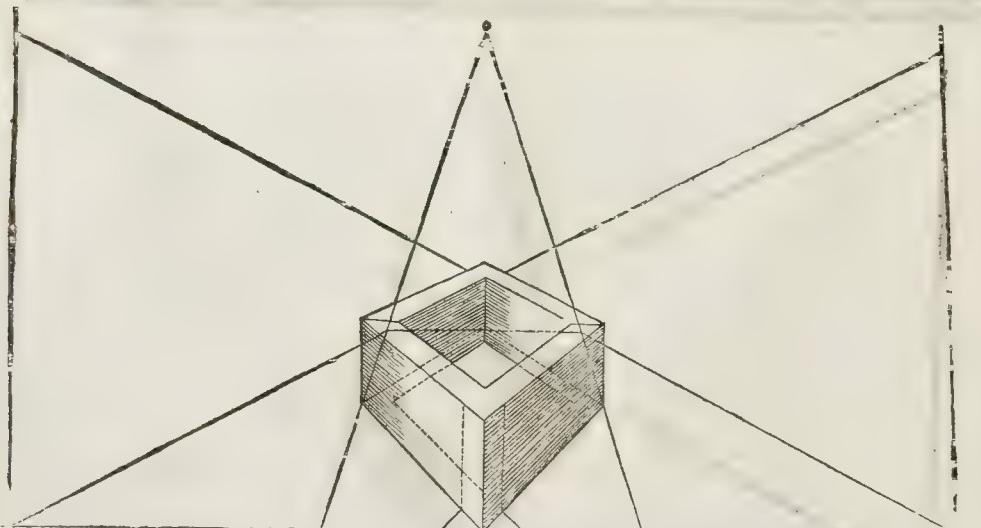


Of Perspective

This Figure is also formed by the aforesayd Horizon, and the like distances as the other before, only that they stand a little nearer to thow to creast this body both about & beneath. you must imagine the greatness of the creast, and draw the same great ness both above and beneath the body ; then gine the Crests above their due Projecture, and from those points you must let perpendicular lines fall to the points or corners below, wherby you shall haue the Projections of the Hale and top thereof, whch must be drawinge towards the Distances, and not towards the Horizon. Now you see how the Cornicles stand without the square body : but this is onely for Cornicles that are made without members, not to comber you with the shadowing of them, for I will speake of them hereafter particularly.



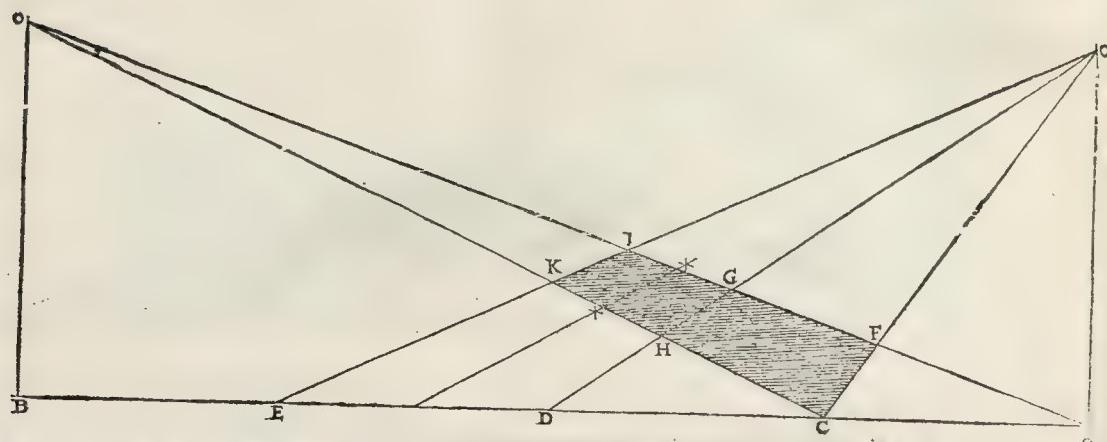
I Spake before of Cornicles without members, which might serue this hollow Quadran, and how you shall make the terminati on thereof. Now in this Figure I shew you the sayd Cornicles with their members, which you may also make in other maner as it pleaseþ the workeman, that is, to make them bigger or lesser, as I have spoken of other Cornicles, always vþing good direction and judgements to chuse and make such members therem, as may shew well in mens sight. There are some Cornicles which reach so farre over, that men can not see the members thereof vnder them ; therefore in that case the members are so to be made, that they may be seemly and pleasant in mens sight.



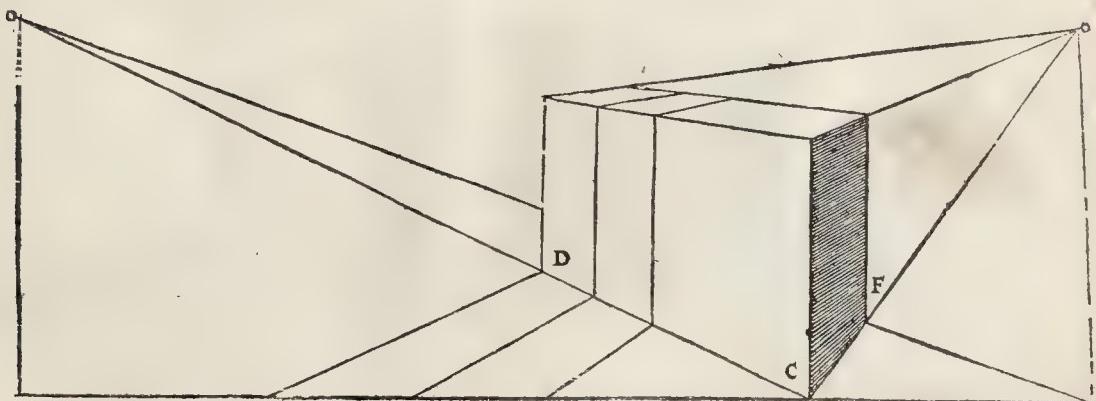
The second Booke.

The third Chapter, Fol. 22.

The four Figures also laid have their distances equally broad from the Horizon, that is, as much on the one side as the other; but the Figure following is of an other manner: so that the Horizontal lines serve both for distances. To understand it, begin thus: First, the Base A.B. is made and is placed in four equal parts, as C.D.E. the line C.D. are drawn on the right hand towards the Horizon, and the lines A.C. are drawn towards the Horizon on the left side, which forme a perfect shortening four square; which four squares you see now on the one side, then on the other. The four points or corners of these four square things, are F.G.H.C. If you divide these four square things in two parts, then you must divide the Base D. B. in two parts, and the terminations thereof being drawn to the right side, here you shall have the hale of your four square marked with two Stars. But if you will lengthen it another halfe square longe, then draw a termination E. to the right Horizon, the lines at L. K. the other halfe four square, so that these superficies shall be of two perfect square corners: And this will serue the ingenious workeman for many things, which I will not here set downe for brevite sake.

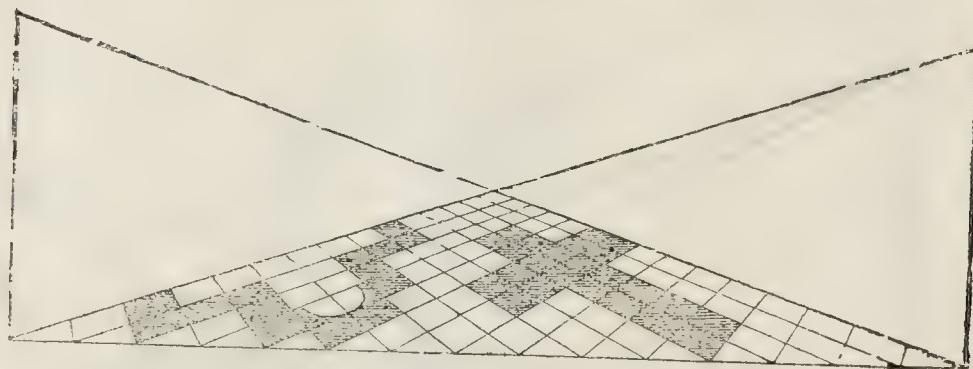


This body hereafter following is rased vp out of the former Figure before set downe, and is made with the same Horizon, which body containeth two Quadrants in length, & one Quadrant in height: so the line C.D. is set in a perpendicular manner by the other and corner, wheron the other Superficies are set: this then this body is of two four square, & make two four squares in length, and one four square broad and high. And this body (as I said before) shall serue for many things: But if you will haue more cubits in the length, then lengthen the Base in so many parts more, and you shall alwaies finde the truth hereof. And if you will make a boord or creat about this body, then you must follow this rule abovelaid.

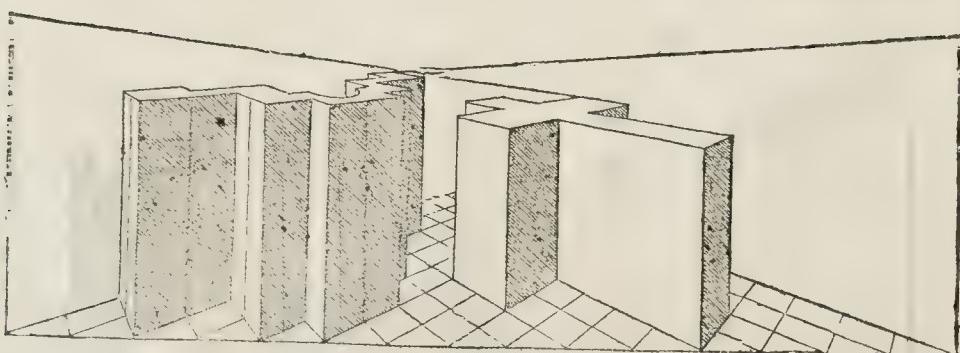


Of Perspective

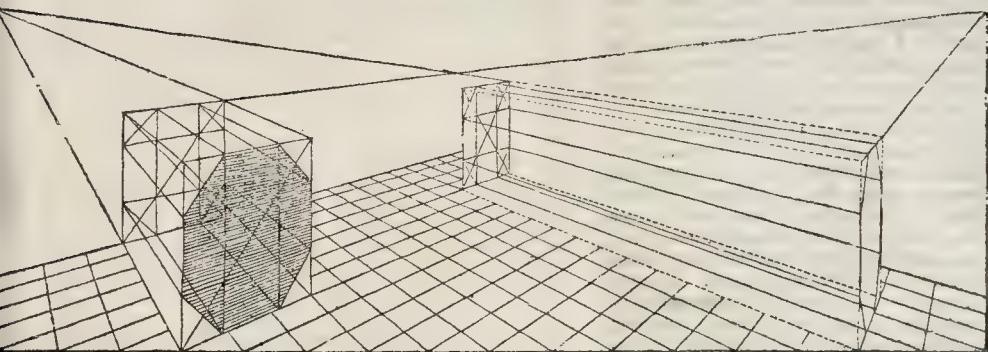
BE it here set downe, and therupon frame what you thinke good vpon the Quadranſ, and the leſt the Quadranſ aſte, and the more in number, you may the easier frame things vpon them. The creſce made vpon this ground is onely to shew you the way and entry threento; but for ſuch a forme, you may make a forme of a Chriftian Church as they are now builte. The other forme by it, ſheweth a piece of a foundation of a Houſe, but all theſe things you may make in a greater forme, and ſet them forth as you will, ſometime placing the Horizontall lines in ſuch manner that you may ſee more of the out ſides, but yet the Horizons muſt stand all of one height.



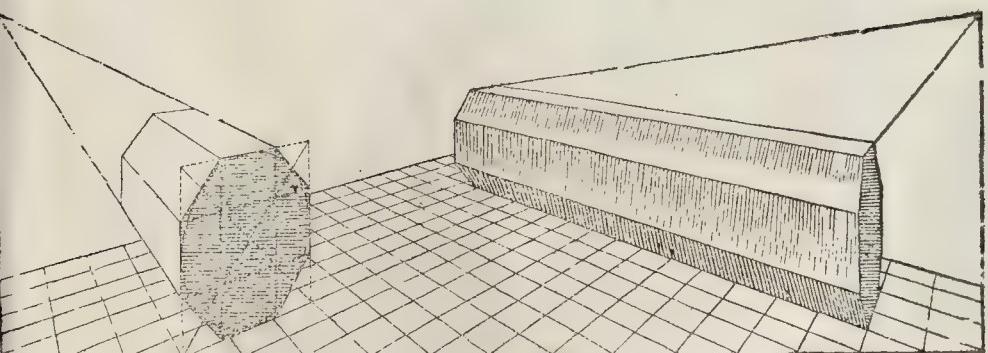
OſT of this Superficiall Figure abovesayd, I have rayfed theſe bodies, to ſhew how the Horizons of them doſt ſtand in the worke as well above as below, as you shall finde by expeſience, and in trueth the worke which you ſe ouer the points or corners, containe a Booke alone by themſelues: but (as I layd before) my meaning was to ſhow but the ouer figures of them, yet I will ſhow ten of them; intending to leave the Student ſome worke, whereto I am well affurth: For that he hath moare eyes, and moare patience then my ſelfe, hee shall finde many things which I write not of, nor yet ſet downe.



Vpon this Pavement (as I say) you may soone or frame what you will, but in this Pavement here ensuing, you see a columnne rising, being eight square, whiche is thre Quadrans in thicknesse, and fourteene in length. This eight square columnne may be made out of a columnne of foure square, as before in another place is shewed: which foure square you may see drawne herein with pickes, and the terminations of the eight square with blacke lines. But because that this eighthe square columnne is too muche sene on the sides, the reader to make it out of the foure square: I have therefore made an other piece by it, the which, because it draweth nacer to this Pavement, is seen more before, then the other, although not so long; for it is but halfe so long as the other, as you may see if set it in the ground or not herof. And if it were so that this eighthe square Figure reached nacer to the Pavement, it would then be better sene, yet it would not be wholly sene before, because it standeth without the foure square and corner.



These Columnnes are the same which are before let downe, but the other well hollow, and these making, whereby an expert workman may finde out many things exercising this war, although there are other meanes to be used, as Albre Durer hath shewed, to looke through holes with a thread: There is also another way, which is drawing out of it formes which is the surest way, but very troublousome and hard to describe in writing; wherfore I have chosen this as the easies way to be shewed. And if I had not undertaken to shew other things of more importance, I would have drawne divers bodies after this manner. But for that I merte to entreat of Scenes, an the preparing of places for to shew Comedies and Tragedies, which is now used in this age, and specially in Italy, wherefore I will make an end of these sorne coynred things, leaving it to another (as I sayd before) to set forth more pretious,



Of Perspective

BY cause I meanes hereafter to cytreate of Theaters, and Scenes belonging vnto them, as we vse them in these dayes. In the whiche Scenes it will bee very hard for a man to shew how, & where a man shoulde place the Horizon herein, because it is an other thing then the rule before declared: Wherefore I thought it good first to make this profit, that the ground by the profit may both together be the better vnderstood; yet it were convenient first to studie the ground, and if it so falleth out that a man cannot attaine to all within the ground, then he must procede to the profit to bee the better instructed therin. First therefore, I will begin with the Scaffold before, which as the eyes shall stand elevated from the earth, and halbe flat, made by the water compasse, marked with C. And the Scaffold from B. to A. shall stand heaved vp under the same A. a ninth part of the lengththereof, and that standing vp behind the seat marked with an M. above it, is the wall of the Hall or other place, against which, or where this Scene shall be made. That which standeth a litle distant from the Wall Perpendicularelywise, is marked P. That be the backe or vpholding behind of the Scene, that a man may go betwene it and the other wall. The termination O. is the Horizon. The lines with prickes comming croisid upon the water compasse from L. to O. Where it toucheth the backe P. there you shall placeths Horizon onely to serue for the sayd backe. And coming farwards to L. this line shall always be the Horizon, for all the Optographicie of the Houses which shall L. stepplards or outwards: But the Scenographies or shortening sides of the Houses, they must haue their Horizons standing further to O. And it is reason, which in effect haue two sides (as the must be built that men may sit ouer on both sides) should happen two Horizon lines, this is touching the profit of the Scene. But the place which is called Proscenium is that which is in the wall P. and the part marked with E. is called Orchestra, which is raised halfe a foote from the earth, where you see F. unmarked, are the places for Noblemen and Knights to sit on. And the first seate or step, marked G. are for the Noblewomen and Ladys to sit on: and going vp higher, there must the meane sort of people sit. The bzauder place, marked H. is a way, and so is the place marked E. Betwene H. and E. must sit Gentlemen of quality. And from L. vpwards meane Gentlemen shall sit. But the great space, marked K. shall be for common Officers and other people: which place may be greater or lesse, according to the length of the Hall, or any other place. And the Theater, with the Scene or Scaffold, which I made in Vincente, was almost in this sort: and from the one corner of the Theater to the other, was eyght and twenty foote; for it was made in a place wheres I had comme inough, but the Scene or Scaffold was not so broad, because it was placed in a lodge. The frame of the seats was all made in one, as you may see in this Figure. And because the Theater stood in an open place which had no wall, whereunto it might be made fast, therefore in the circumference I haue made it sticking out, for the more strength and fastnesse therof,

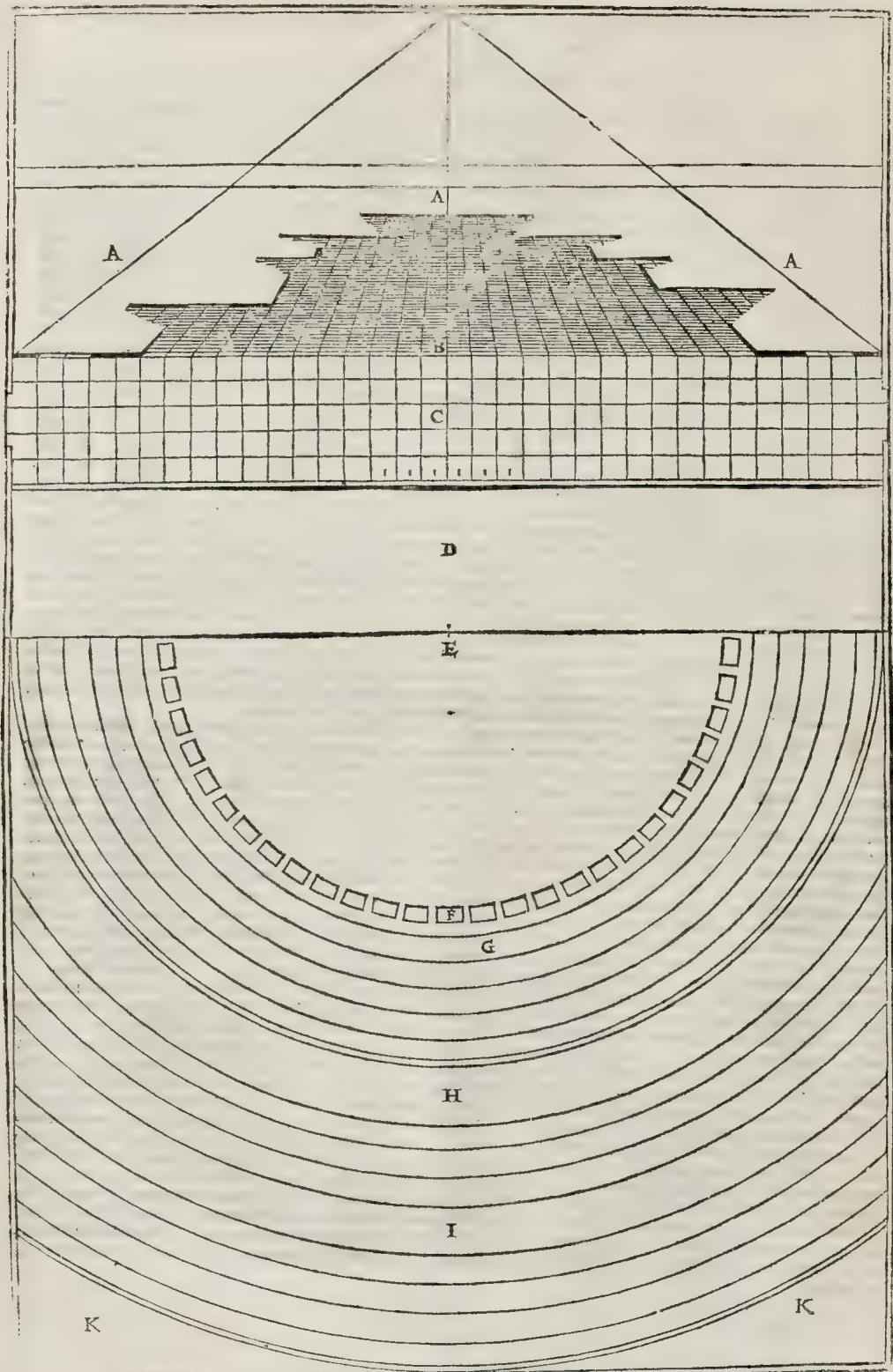


A Treatise of Scenes, or places to play in.

Among all the shynes that may bee made by mens hands, thereby to yeld admiration, pleasure to sight, and to content the fantasies of men; I thinke it is placing of a Scene, as it is shewed to your sight, where a man in a small place maye bee built by Carpenters or Masons, skilfull in Perspective worke, great Palaces, large Temples, and divers Yonnes, both neere and farre off, broad places filled with Houses, long stræts cross with other wayes: triumphant Arches, high Pillars or Columnnes, Pyramides, Obelisks, and a thousand sayze things and buildings, adorneed with immensable lights, great, middle sort, and small, as you maye see it placed in the Figure, which are so cunningly set out, that they shew sooth and represent a number of the brightest stones; as Diamonds, Rubins, Saphirs, Smaragdes, Jacinthes, and such like. There you may see the bright shining Yonne ascending only with her bones, and already risen vp, before the spectators are ware of, or once saw it ascend. In some other Scenes you may see the rising of the Sunne with his course about the world: and at the ending of the Comedie, you may see it goe downe most artificially, where at many beholders haue beene abast. And when occasion serueth, you shall by Arte see a God descending downe from Heaven, you also see some Comets and Stars shot in the kythes: then you see divers personages come vpon the Stage, richly adorneed with divers strange foymes and manners of Apparell both to daunce Portes, coes and play Pusche. Sometimes you see strange beasts, wherein are men and children, leaping, running, & Tumbling, as thosse kind of beasts use to doe, not without admiration of the beholders: which things, as occasion serueth, are so pleasant to mens eyes, that a man could not see fairer made with mens hands. But for that we are entred into another maner of Perspective worke, therefore I will speake more at large thereof. This Perspective worke whereso I will speake, although it be contrary to those rules whiche are shewed before, because these aforesayd are imagined to be vpon a flat wall: and this other rule because it is materiall and imbolded or rayled outward, therefore it is reason we obserue another rule therein, according to common custome. First, you must make a Scaffold, which must bee as high as a mans eye will reach, looking directly forward; for the first part thereof which is marked C. But the other part behind it, whereon the Houses stand, you must rayle by behinde against the wall at least a ninth part thereof, that is, you must deuide the playne Stage or Scaffold in nine parts; and then you must make the Scaffold higher by a ninth part behinde: then before B, which must be very even & strong, because of the Morisco dancers. This hanging downward of the Scaffold, I have found by experiance to be very pleasing, for in Vincenzo which is as sumptuous and rich a Theatre as any in all Italy; there I made a Theater and a Stage of wood, then the which, I think, there was never a greater made in our time, in regard of the wonderfull lights that there were leerne, as of Wagons, Elephants and other Moriscos. There I ordained, that before the hanging Scene there should be a Scaffold made by water compasse, which Scaffold was 12. foot broad, and 60. foot long, according to the place whereto it stood, which I found to be very pleasing and fit for shew. This first Scaffold, because it was right, therefore the pavement therof must not obey the Horizon, but the Quadrans, wherof on every side were fourre square, from whence at the beginning of the rising Scaffold B, all the Quadrans went to the outermost Horizon O, whiche with their due distances do shorthen very well. And so that some men haue placed the Horizon of this Scenographie againe the wall right above the Scaffold, whereby it serueth the Houses runne all in one; therefore I determined to place the Horizon before the doore, which pleased me so well, that I vied the same kind of order in all these kind of works: and so I counsell those that take pleasure in such Arts, to use and esteeme this way for the best, as I will shew in this Figure following, and haue also declared in the profil of the Theater and Scene.

And because the preparation for Comedes are done in these sortes, that is, Comical, Tragical and Satiricall; I will first entreat of the Comical, wherof the Houses must be made as if they were for common or ordinary people, which for the most part must be made vnder rooves in a Hall, which at the end thereof hath a chamber for the pleasure or ease of the personages: and there it is that the ground of the Scaffold is made (as I said and shewed before) in the profil. Therefore C, is the first part being the flat Scaffold; and suppose that each Quadrant containeth two fote on either side, so shall they vpon the hanging Scaffold before on the Base be also two fote broad, which is marked B. And (as I said before) my meaning is not to place the Horizon hereof against the backe behinde in the Scaffold, but as farre as it is from the beginning of the pavement B, to the wall, so farre I would also that men shall passe behinde through the wall, and so shall all the houses, and other things shew better in the shorthening: and when by convenient distancies you haue drawne all the Quadrans towards the Horizon, & shorthened them, then you must shorthen the houses right with the fourre square houses, which houses are the great lines marked vpon the ground, alswell for those that stand upright, as those that shorthen. All such houses I alwayes made of spars, or rafter or laths, couered with linnen cloth; making dores and windowes, both before and in the shorthening, as occasion fell out. I haue also made some things of halfe plancks of wood, which were great helpe to the Painter to set out things at life. All the spaces fro the backe to the wall marked A, shall be for the personages, to the which end the hindermost backe in the middle shall stand at the least two fote from the wal, that the personages maye gaue from the one side to the other, and not be scene. Then you must rayle a termination at the beginning of the pavement B, which shall be the post L, and from thence to the Horizon there shalbe a line drawne, as it is marked in the profil with pickes, which shall be of like height; and where that toucheth the hindermost backe of the Scene or Scaffold, there the Horizon of that backe shall stand: and that Horizon shall serue onely for that backe. But if you stretch a corde or any other thing to the termination L, then you may fallen a thred to it, to thrust backward or forward, to use it out of the stedfast Horizon, & all the Scenographie of the houses before. But the Horizon which goeth through the wall, shall serue for all the shorthening dores of the houses: and for that men should breake the wall, if they would use all this Horizon in grosse, which may not bee done, therefore I haue alwayes made a small modell of wood and Paper vnt of the same bignes, and by the same modell set it downe in grosse, from piece to piece. But this way will fall out hard for some men to understand, nevertheless, it will be necessary to wotke by modelles and exeriments, and by studie a man shall find the way: and for that a man can hardly finde any Halls how great soever, wheren he can place a Theater without imperfection and impediment; therefore to follow Annoyances, according to my power and abilitie, I haue made all such parts of these Theaters, as may stand in a Hall. Therefore the part marked D, shall be the post scene, and the circular place marked E, shall bee the Orchestra: round about this Orchestra shall be the places for the noblest personages to sit, marked F. The first steps marked G, for the noblest women to sit vpon. The place H, is a way, so is the part marked I. In the middle betwix these degrees are steps the easier to goe vp. The places marked K, must bee made to great backward as the Hall will afford, which is made somewhat sloping, that the people may see one ouer the others head.

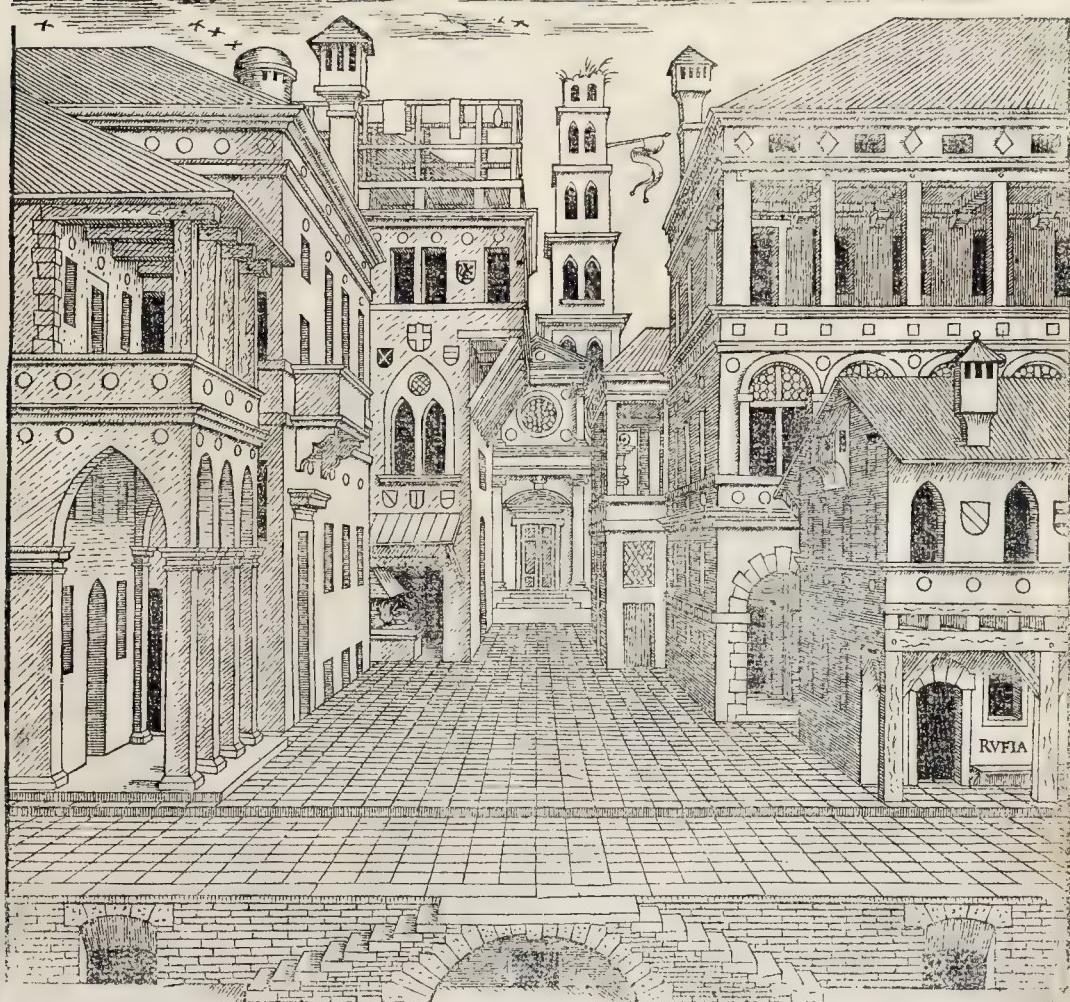
On Perspective



The second Booke.

The third Chapter. Fol. 25.

Touching the dispositions of Theaters and other Scenes, concerning the grounds thereof, I have spoken sufficiently; now I will speake of the Scene in Perspective worke: and so that Scenes are made of thys sort, that is, Comical, to play Comedies on, Tragical, for Tragedies, and Satiricall for Satires. This first shall be Comicall, whereas the houses must be slight for Citizens, but specially there must not want a brawthell or bawdy house, and a great Inne, and a Church; such things are of necessarie to be therein. How to rayle these houses from the grounds is sufficiently exprest, and how you shall place the Horizon: nevertheless, that you may be the better instructed (touching the former of these houses) I haue here set downe a Figure, for satisfaction of those that take pleasure therein; but because this Figure is so small, therein I could not obserue all the meaures, but referre them to intention, that thereby you may chuse or make houses which shal well, as an open Gallery, or lode through the which you maye see an other house. The hangings ouer or shooting out, shal well in shortening worke, and some Coynes cut out at the ends; accompanied with some others that are painted, shal well in worke: so doe the houses which haue great bearing out, like lodgings or Chambers for men, and especially above all things, you must set the smalest houses before, that you may see other houses ouer or above them, as you see it here above the bawdy house: for if you place the greatest before, and the rest behynd will letten, th n the place of the Scene would not be so well filled, and althoughe these things vpon the one side be made all vpon one storie: Nevertheless, for that you place great part of the lights in the middle, hanging ouer the Scene or Stage: therefore it wold stand better if the flares in the midst were taken away, and all the roundels and Quadzans which you see in the Buildings, they are artificiall lights cutting through, of divers colors; whiche to make, I will shew the manner in the last of this Booke. The windowes which stand before, were good to be made of Glasse or Paper, with light behind them. But if I shold here write all that I know to serue for this worke, it wold be ouerlong to rehearse; therefore I referre that to the wit and discretion of those that exercise and practise themselves herein.



Of Perspective

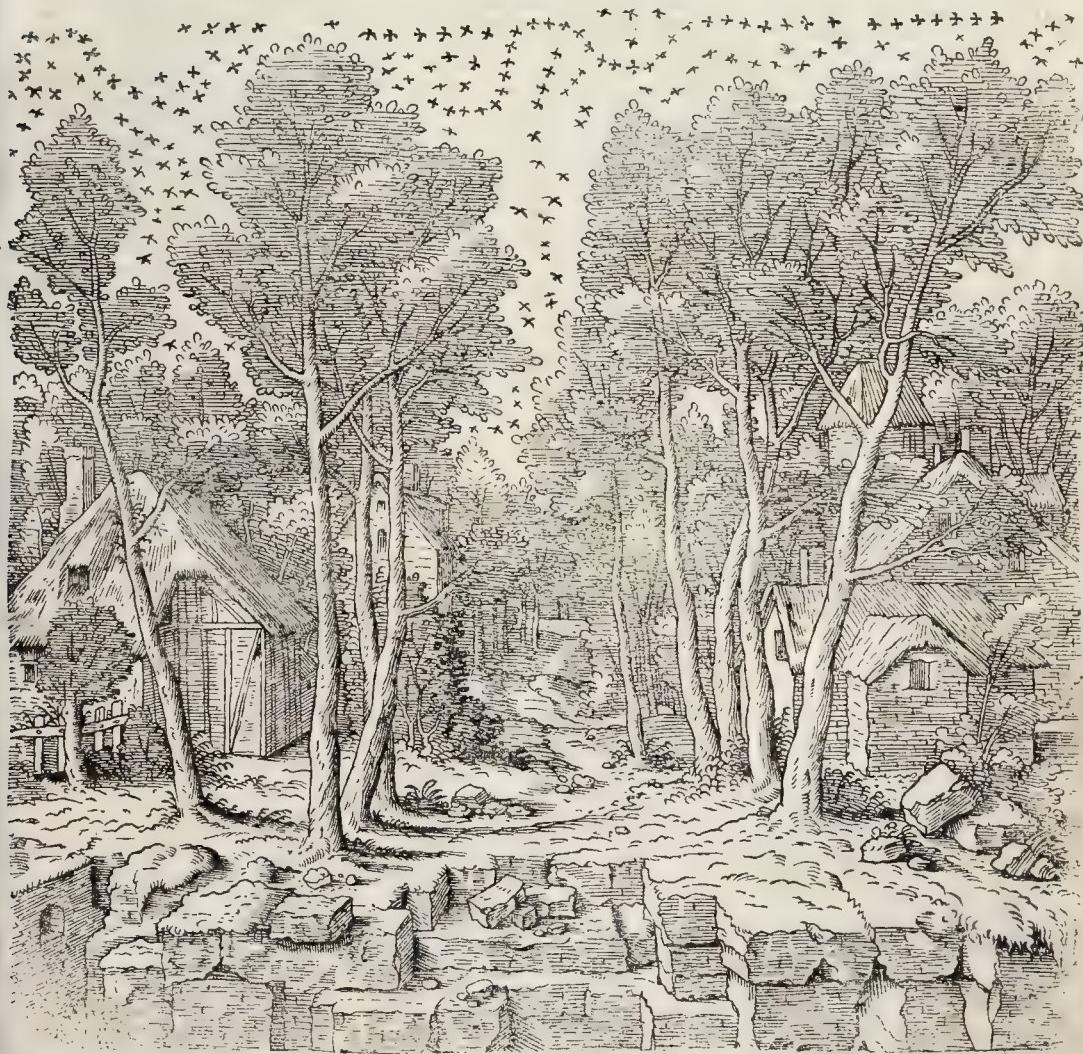
Houses for Tragedies, must bee made for great personages, so that actions of lone, strange adventures, and cruell murders, (as you reade in ancient and moderne Tragedies) happen alwaies in the houses of great Lords, Dukes, Princes, and Kings. Therefore in such cases you must make none but Hatch houses, as you see it here in this Figure; wherein (for that it is so small) I could make no Princely Pallaces: but it is sufficient for the wo: he man to see the manner thereof, whereby he may helpe himselfe as time and place serveth: and (as I sayde in the Comical) hee most alwaies stude to please the eyes of the beholders, and forget not himselfe so much as to let a small building in stead of a great, for the realions aforesayd. And for that I have made all my Scenes of laths, covered with linnen, yet sometime it is necessary to make some things rising or boſſing out; which are to bee made of wood, like the houses on the left ſide, whereof the Pillars, although they ſhorten, ſtand all upon one Hale, with ſome ſtaffes, all couered over with cloth, the Cornices bearing out, which you muſt obſerue to the middle part: But to give place to the Galleries, you muſt ſet the other ſhortening Cloth ſomewhat backwarde, and make a cornice aboue it, as you ſee: and that which I speake of theſe Buildings, you muſt understand of all the reſt, but in the Builings which ſtand far backward the Painting worke, muſt ſupplye the place by shadowes without any bearing out: touching the artificiall lights, I haue ſpoken thereof in the Comicall works. All that you make aboue the Roofe ſticking out, as Chimerees, Towers, Piramides, Obelikes, and other ſuch like things or Images; you muſt make them all of thin boords, cut out round, and well colloured: But if you make any flat Buildings, they muſt ſtand ſome what farre inward, that you may not ſee them on the ſides. In theſe Scenes, although ſome haue painted perſonages therin like supporters, as in a Gallerie doore, as a Dog, Cat, or any other beaſt: I am not of that opinion, for that ſtandeth too long without stirring, or moouing; but if you make ſuch a thing to lie ſleeping, that I hold withall. You may also make Images, Histories, or Fables of Marble, or other matter againſt a wall; but to represent the life, they ought to ſtirre. In the latter end of this Booke I will ſhew you how to make them.



The second Booke.

The third Chapter, Fol. 26.

The Satiricall Scenes are to represent Satires, whereat you must place all those things that be rude and rusticall, as it ancet Satires they were made plaine without any respect, whereby men might understand, that such things were referred to rustick people, which set all things out rudely and plainly: for which cause Virgilius speaking of Scenes, saith, they shalld be made with Trees, Roots, Herbs, Hills and Flowres, and with some countrey houses, as you see them here set downe. And so that in our dayes these things were made in Winter, when there were but fewe grane Trees, Herbs and Flowres to be found; then you must make these things of Wilke, which will be more commendable then the natural things themselves: and as in other Scenes soz Comedies or Tragedies, the houses or other artificiall things are painted, so you must make Trees, Herbs, and other things in these; & the more such things cost, the more they are esteemed, for they are things which stately and great persons doe, which are enemies to rigardinesse. This haue I scene in some Scenes made by Ieronimo Genga, for the pleasure and delight of his lord and patron Francisco Maria, Duke of Urbino: wherein I saw so great liberalitie bled by the Prince, and so god a carent in he workeman, and so god Art and proportion in things therem represented, as ever I saw in all my life before. Oh good Lord, what magnificence was there to be scene, for the great number of Trees and Fruits, with sundry Herbes and Flowres, all made of fine Wilke of divers coloures. The water courses being adnowed with Frogs, Hailes, Tortules, Toads, Adders, Snakes, and other beastes: Roots of Corkale, mother of Pearle, and other hels layd and thust through betwene the stones, with so many severall and faires things, that if I shoulde declare them all, I shoulde not haue time enough. I speake not of Saturs, Pumphes, Peermades, diuers monsters, and other strange beastes, made so cunningly, that they seemed in shew as if they went and stirred, according to their manner. And if I were not desirous to be briefe, I wold speake of the costly apparel of some Shepheards made of cloth of gold, and of Wilke, cunningly mingled with Embrothery: I would also speake of some Fishermen, which were no lesse richly apparellled then the others, haing Nets and Angling rods, all gilt: I shoulde speake of some Countrey mayds and Pumphes carelessly apparellled without pride, but I leauue all these things to the discretion and consideration of the iudicious workeman, which shal make all such things as their patrons serue them, which they must worke after their owne devises, and never take care what it shall cost.



Of Perspective

Of Artificiall lights of the Scenes.



Premised in the Treatise of Scenes to set downe the manner how to make these lights shinning through, of diverse colours, & first I will speake of a fure collour which is like to a Zaphir, and yet somewhat fayrer. Take a piece in Salamonische, and put it into a Barber's Water, or such like thing, and put water into it: then bysse and crush the Salamen: the losly therem, till it be all molten, alwaies putting more water vnto it, as you desire to haue it lusty or fad colour, which done, if you will haue it faire and cleare, then straine it through a fine cloth into an other bottle, and then it will be a cleare Celestiall blew, wherof you may make divers kinds of blew with water. Will you make an Emerald colour, then put some Saffron as you will haue it pale or high coloured; for heire it is not necessary to prescribe you any weight or measure, forsoch it experiance will tauch you how to doe it. If you will make a Rubbie colour, if you bee in a place whiche you may haue red Wine, then couert not vnto any other thing, but to make it pall with water, as need requireth: but if you can get no wine, then take Brazil beaten to powder, & put it into a Kettell of water with Allum, let it ferthe, and shan it well; then straine it, and ble it with water and Turnegar. If you will couerter it a Wallares, you must make it of red and white Wine mingled together; but white Wine alone will shewe like a Topas or a Crissolite: The Conduit or common water being strained, will be like a Diamond, and to doe this well, you must vpon a glasse ground frame certayne poris or tablets, and fill them with water. The maner to set these scenaire coloures in their places, is thus, Behad the painted house wherin these painted coloures shall stand, you must set a thin board, cut out the same manner that these lights shall be placed, whether it be round or square, cozined or ened, like an Eye; and behind the same board there shalbe another stronger board layd flat behind them, for the bottels and other manner of glasses whiche these wens to stand in, must be placed against the holes, as it shall neceſſarily fall out, but they must be set fast, lest they fall with leaping and dancing of the Moriscoes. And behid the glasses you must set great Lampes, that the light may also be stedfast: and if the bottels or other vessels of glasse on the side where the light stande were flat, or rather hollow, it would shew the clearer, and the coloures wouldest excellente and faire; the like must be done with the holes on the shewting side: But if you need a great light to shew more then the rest, then set a torch behide, and behid the torch a bright Balon, the brightnes wherof will shew like the beames of the Sunne. You may also make glasse of all coloures and formes, some sone square, some with crosses, & any other forme with their light behinde them. Now to all the lights serching for the coloures, shall neceſſarily be ſame which muſt light the Scene, for you must haue a great number of torches before the Scene. You may also place certayne candlestickes above the Scene with great candies therin, and aboue the candlestickes you may place some bottels with water, wherin you may put a piece of Camphir, which burning, will shew a very good light, and swelle well. Sometime it may chance that you must make ſome thing or other whiche ſhoulde ſeme to burne, whiche you must ſet throughly with excellent good Ayanite, and ſetting it on fire with a candle it will burne all ouer: and althoſh I could ſpeak more of thys fires, yet this ſhall ſuffice for this time; & I will ſpeak of ſome things that are pleaſing to the beholders. The vhole that the Scene is empit of perfonages, then the workmen muſt haue certayne Figures or ſormes ready of ſuch greatness as the place whiche they muſt ſtand, will afford them to be, whiche muſt be made of paste board, cut out round and painted, ſignifying ſuch thinges as you will, whiche Figures muſt leane againſt a rule or rail of wood, croſſe ouer the Scene where any gate, doore, or way is made, and there ſome one or other behinde the rule muſt make the Figures paſte along, ſometime in forme of Muliations with iuſſuemenis, and ſome like Singers; and behinde the Scene ſome muſt play on, vpon certayne instruments and ſing alſo: sometime you muſt make a number of ſoothe men and hoſtemen going about with Trumpets, Phifes and Drummes, at which time you muſt play with Drumbes, Trumpets and Phifes, &c. vnder ſoitly behinde, which will kepe the peoples eyes occupied, and content them well. If it be riuitiſte to make a Planet or any other thing to paſte along in the Eye, it muſt bee framed and cut out of paste-board; then in the hidernesse and backe part of the houses of the Scene, there muſt be a pieſe of wire drawne aboue in the roſe of the horie and made fast with certain rings behinde the pasteboard painted with a Planet or any other thing that ſhalbe drawne ſoſly by a man with a blacke thred from one end to the other, but it muſt be farre from mens light, that neither of the thredds may bee ſene. Someſtyme you ſhall haue occation to ſhewe thunder and lightning as the play requireth; then you muſt make thunder in this maner: commonly all Scenes are made at the end of a great Hall, vhereas vſually there is a Chamber aboue it, wherin you muſt reule a great Bullet of a Cannon or ſome other great Ordinance, and then counterfet Thunder. Lightning muſt be made in this maner, there muſt be a man placed behinde the Scene or a Crafteſeld in a high place with a bore in his hand, the cover wherof muſt be full with holes, and in the middle of that place there ſhall be a burning candle placed, the bore muſt be filled with powder of vernis or ſulphure, and daſhing his hand with the bore upwards the powder flouing in the candle, will ſhew as it were lightning. But touching the beames of the lightning, now muſt draw a pieſe of wire ouer the Scene, which muſt hang downwards, wherin you muſt put a ſquid conered ouer with pure gold or ſilver, latyn which you will: and while the Bullet is cooling, you muſt ſhoote of ſome pieſe of Ordinance, and with the ſame giving fire to the ſquid, it will worke the effect whiche is deſired. It would be overlong if I ſhou'd ſpeak of all thinges which are to be vſed in theſe affaires, therefore I will leaue ſpeaking of Perspective things.

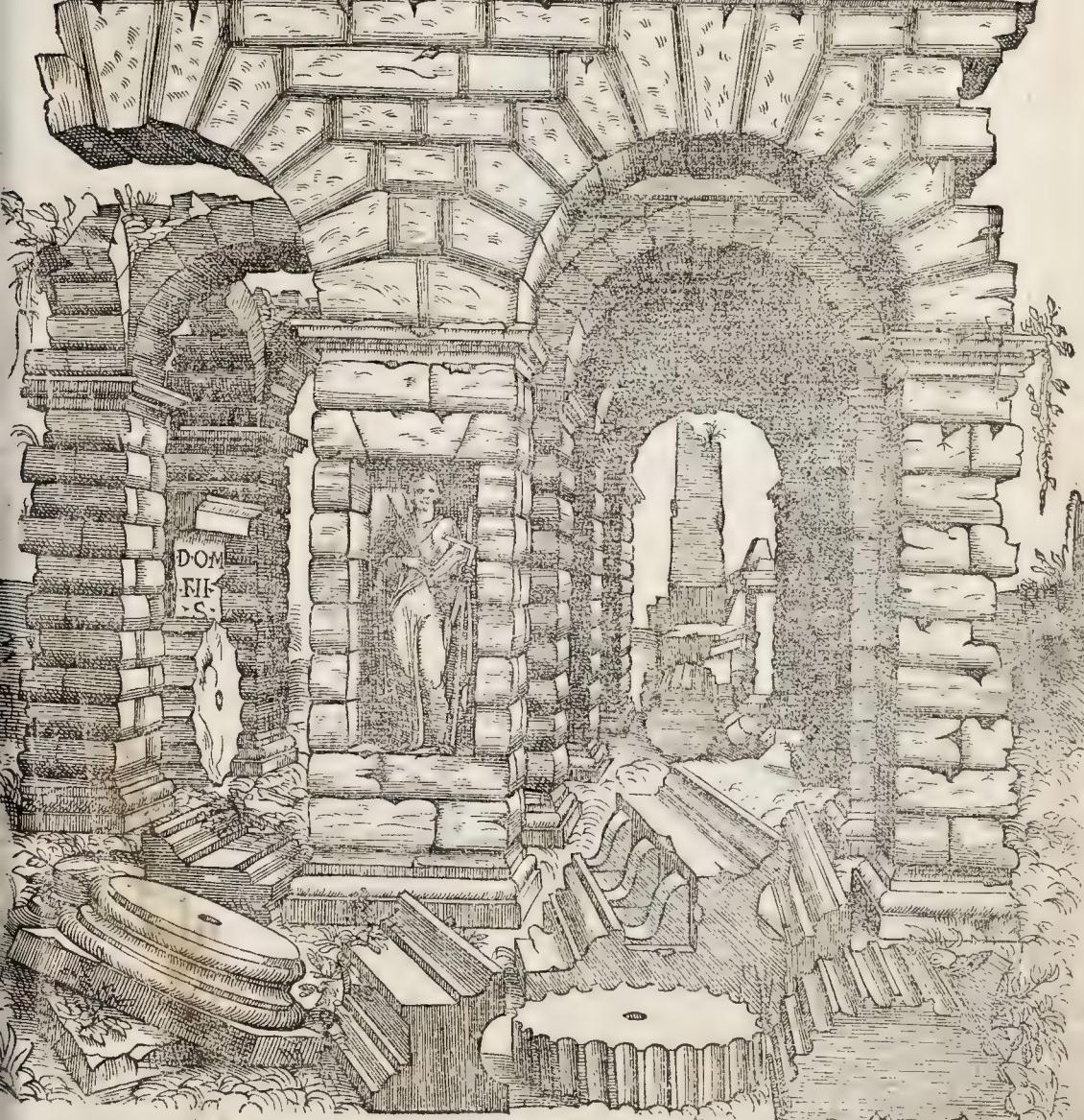
F I N I S.

Here endeth the ſecond Booke of Architecture, entretaining of Perspective Arte; tranſlated out of Italian in o Dutch, and out of Dutch into English, at the charges of Robert Peake,
for the benefit of the English Nation; and are to be ſold at his houſe nere
Holborne Conduit, vnder the Sunne Tancere. 1611.

The third Booke,

In treating of all kind of excellent Antiquities, of buildings of
Houses, Temples, Amphitheaters, Palaces, Thermes, Obelisks, Bridges,
Arches triumphant, &c. set downe in Figures, with their grounds
and measures: as also the places where they stand, and who made them.

ROMA QVANTA FVIT I P S A R VINA DOGET



To the Reader.

A
Though divers Authors write many strange things touching Architecture, as the Egyptians, the people of Asia and Grecia, with divers other nations, and haue left them for our example, so that reading them, we may sufficiently satisfie our eares, and fill them with the greatness thereof, that is, touching the length, breadth and depth, that certain places haue contained; yet we can not satisfie our eyes, nor the desire we haue to see such incredible works, vniuersall it had beeene our hap to haue the contemplation thereof, for that the retiues of such works are almost, or for the most part utterly defaced; or vnlesse we might haue scene them drawne in proportion unto our eyes, as in this Booke we may not onely read, what the Romanes at the last, after other nations had built, but also the same Authors haue set downe unto vs in Figure (as you may see them here) piece by piece, not only how many rods, feet & palmes, but also the minutes thereof, and what compass they contained, all perfectly described. And although it was no part of my intent, to translate this Booke of Antiquities of Rome into our mother tongue, regarding the barrennesse of our language; or peraduenture such as studie or fauour the same, are all too few to defray my charges therein: yet I haue not refrained to doe it, being thereunto compell'd by the great works of the fortification of the City of Andwerp, and other great places; and for this cause specially, that every man that wondreth at the greatness thereof, which was made with most great cost & charges, may hereby see and consider, yea how much greater, & needles charges (to be compared unto this) the Romanes (not speaking of other nation) haue in time past bestowed, in making of Obelisks, Pyramides, Thermes, Theaters, Amphitheaters, triumphantes Arches, and many more such like things, which served only for pleasure & triumph: whereby it is to be presumed, that they would haue made the fortifications of such Cities or Townes, made for the safety of the Land, far better then they now are. Now it is to be noted, that all, whatsoever the Romanes haue made, doth not wilfully agree with Vitruvius rules, so that many which haue counterfeyted these, and such like pieces of worke, haue thereby beeene abused and deceived: for some would hardly beleue, that in those dayes (as well as at this time) all manner of workmen were one better then another, which many, unawares and vnskilfull do many thing: which good Antiquities would willingly not suffer, herof they shall find good instructions in this Booke (and they may learne, if they will read it) how to discerne good from bad; whereunto the former printed fourth Booke is specially made: for in it the whole quantity of the measures is contained, as in the Epistle of the sayd Booke it is promised. So in this third Booke, you shall not onely find, first the Ichneographia, and then after the Orthographie, with part of the Sciographie of the most famous Antiquities of Rome, Italy, and some of other places, but also of the most excellent bulidings in our dayes, specially those that are made by Bramant, So that the Reader being well instructed in the aforesayd fourth Booke, where all the Orders are well set forth and declared, he may of himselfe judge what is well or ill made, that at one time a man may, without any further labour, make a good and incorrigible piece of worke.

The

The third Booke of Antiquitie.

The fourth Chapter.



Mong all the ancient building to bee seene in Rome, I am of opinion, that the Pantheon (for one piece of worke alone) is the fairest, wolest, and best to be vnderstood; and is so much the more wonderfull then the rest, because it hath so many members, which are all so correspondent one to the other, that wholoeuer beholdeith it, taketh great pleasure therein, which proceedeth from this, that the excellent workeman, which inuented it, chose the perfittest forme, that is, the round forme, whereby it is vsually called, Our Lady of the Round: for within, it is as high as it is broad. And it may be, that the sayd workeman, considering, that all things proceeding orderly, haue a principall and onely head, whereon the nether parts depend, was of opinion, that this piece of worke should haue onely but one light, and that, in the highest part thereof, that it might spread abroad in all places alike, as in effect you see it doth: for besides other things which haue their perfect light, there are sixe Chappells, which (for that they stand within the thicknesse of the wall) should be darke, yet they haue their due light, by the meanes of some drawing windowes, aboue in the top of the sayd Chappells, which giue them second light, taken from the vppermost hole, so that there is not any small thing in them, but it receiueth a part of the light, (and this is not made without great iudgement:) for this Temple, in old time, being dedicated to all the gods, by which meanes there stood many Images in it, (which the diuers Tabernacles, Seates, and small Windowes shew) it was necessary that euery one had his due light. Wherefore such as take pleasure to make Images, and other imbossed or grauen worke, must consider, that such a Cabinet should haue his light from aboue, that every one, standing in his place, neede not looke for light to see, but that they may bee seene altogether at one time. But to come to my first speach: For that the Pantheon seemeth vnto me to be the perfectest peece of worke that euer I saw, therefore I thought it good to set it first in the beginning of this Booke, and for a principall head of all other peeces of worke. The founder of this Temple (as Plinie writheth in more then one place) was Marcus Agrippa, to accomplish Augustus Cesars last will, who being intercepred by death, could not finish it: and so it was built about foureteene yeeres after the byrth of our Lord, which is about 5203. yeeres from the beginning of the world.

In this Temple (as Plinie writheth) the Capitals were of Copper; and hee writheth also, that Diogenes, the Image-maker of Athens, made the excellent Caracters in the Pillars, and that the Images placed aboue the Frontespicium were much commended, although by the hightesse of the place they could not be so well discerned. This Temple was consumed with lightening, and burnt, about the 12. yeere of the raigne of the Emperour Traian, which was about 113. yeeres after the byrth of Christ, and in the 5311. yeere of the creation of the world: and Lucius Septimus Seuerus, and Marcus Aurelius Antonius, repayred it agayne, with all the Ornaments thereto belonging, as it appeareth in the Architraue of the sayd frame: which Ornaments, you must presume, were all new made, otherwise the Caracters of Diogenes would still haue bene seene there. But in truth, the workman that made it, was very iudicious and constant; for that he proportioned the members thereof very iudiciously to the body, and would not suppress the worke with many cuttings: but as I will shew, when time serueth, how to place and deuide them excellent well. Also, in all the worke, hee hath obserued the worke of Corinth, and would mixe no other with it: and withall, the measures of all the members are as well obserued as euer I saw or measured in any other peece of worke, whereby we may call this Temple an example of workmanship. But leauing this matter (for that it giueth the workman littl, or no instruction to the purpose) I will proceede to the particular measures: and that I may goe forward orderly in these Antiquities, the first Figure shall be the Ichnography. The second, the Orthography. The third, the Sciography.

Of Antiquitie

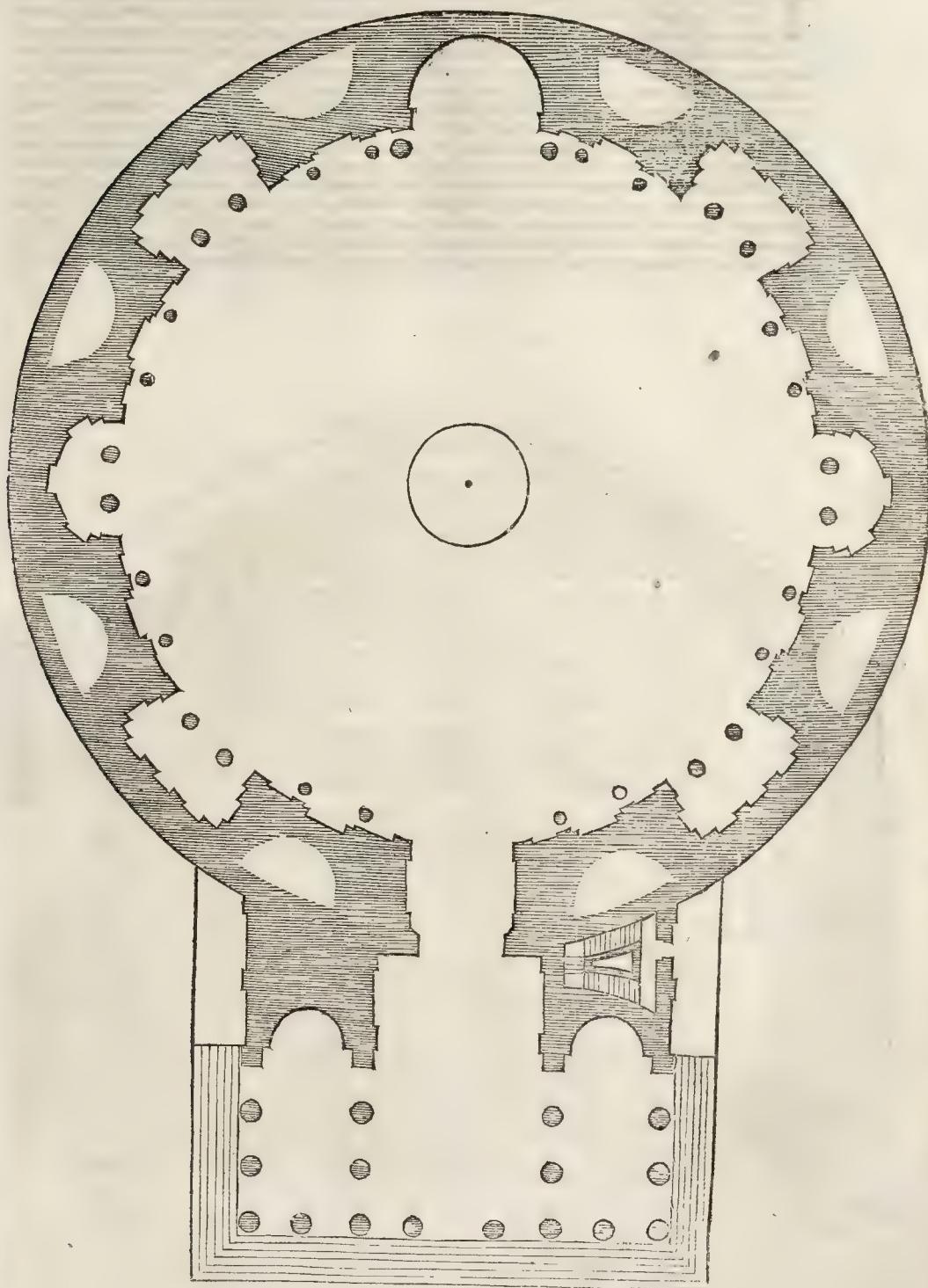
This Figure following is the Ichnography, that is, the ground of the Temple aforesayd, which is measured by the ancient, or old Romish Palmes placed along by the side hereof. And first, (speaking of the Portall, whereof the Columnnes are 6. Palmes & 29. minutes thicke. The Intercolumnes (which are the spaces from one Columnne to another) are 8. Palmes and 9. minutes : the breadth of the Portall is 40. Palmes: the breadth of the flat Pillars of the Portall, is like the Diameter of the Columnnes : the breadth of the Seates betweene the Pillars, is 10. Palmes : and the Pilasters on the sides are 2. Palmes : the widenesse of the Gates is 26. Palmes and a halfe : the widenesse of the whole Temple (that is, of the Floore within, from one wall to another) is 194. Palmes : and iust so much is the height from the Floore to the vndermost stone of the window aboue. The sayd round hole is 36. Palmes and a halfe broad : each of the fixe Chappells that are made within the thicknesse of the wall, are 26. Palmes, and 30. minutes; and goe halfe as deepe into the wall as the thicknesse of the foure square Pillars on each side. But the principall Chappell is thirtie Palmes broad, and also is an halfe Circle, besides the Pillars aforesayd. The thicknesse of the Columnnes of all the Chappells, is 5. Palmes, 3. minutes lesse : the fouresquare corner Pillars also of the sayd Chappells, contayning as much. The Columnnes of the Tabernacle betweene the Chappells are two Palmes thicke : the thicknesse of the wall that goeth round about the whole body of the Temple, is 31. Palmes. And although that the Chappells make the walies hollow, yet betweene them there are hollow places made within the walies, which some say, were left for places to receiue wind, because of earthquakes. But I am of opinion, that they were left so vnfilled, to spare stufte, because they are made circleyfite, and are strong inough. The going vp, which you see here on the left side, was also on the right side, to go vp the Portall: men also went from thence round about the Temple, ouer the Chappells, through a secret way, which is yet there: through the which also, they went without on the steps, to clime vp into the highest parts of the buildings, with many goings vp which are round about it. It is thought, that this foundation was all one masse or lumpe, and without, many places hollow, so that some neighbours marking it, and seeking to build, haue found such a foundation when they digged.

This is the old Romish Palme, which is deuided into twelue fingers, and each finger is deuided into foure parts, which are called Minutes, by the which measure this present Figure, with all the parts following, was measured.

The third Booke.

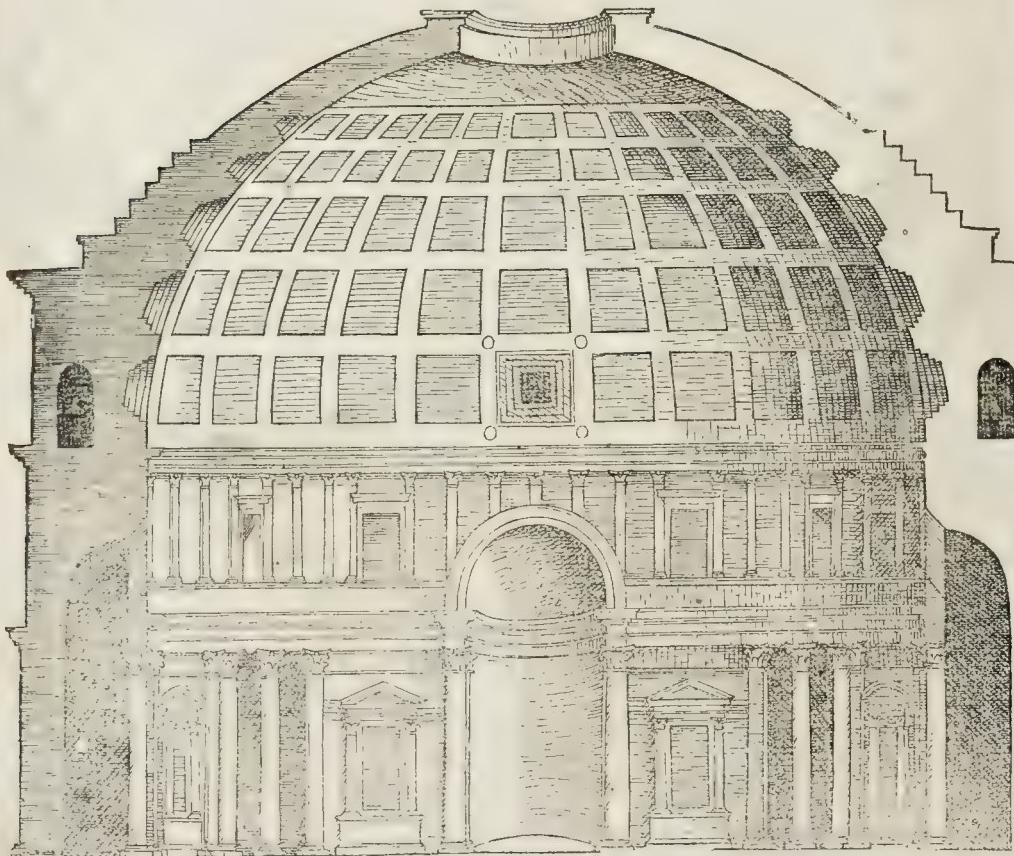
The fourth Chapter, Fol. 2.

The ground of the Pantheon called Rotonde.



Of Antiquite The forme of the Pantheon without.

The Figure hereunder sheweth the whole forme of the Pantheon right before, and although at this time men go downe into it by certayne steps; yet as it was made at the first it was seven steps above the ground. It is no wonder that such and so old a piece of worke is yet whole and standing still, for that the foundation was not sparingly made; for it is thought that it was once as broad againe vnder as it is above, as it had bee found by the neighbour Inophemen: but let vs proceed to the particular measure therof from the earth vnpwards. I say before, that the Diameter of the Columns of the Portal is five Palmes + nine and twenty minutes, but the height is four and telle Palmes and nine and twentie minutes, without the Bases and Capitals: the Bases are three Palmes and nineteen minutes high, and the Capitals seven Palmes and seven and thirtie minutes high; the height of the Architrave is five Palmes, the Frise is five Palmes and thirtene minutes high; the Cymice is four Palmes and nine minutes high, aboue from the top of Scina of the Cornice, to the point of the Gowell, are four and thirtie Palmes, and nine and thirtie minutes. The Tympanum, that is, the flat part of the Gowell, is thought to haue bene adorneed with silver images, althought it is not set downe in writing, but considering the great power of such Emperors, I am perswaded that it was so, for if the Gothes, Vandals, or other nations (which spoyle ROME more then once) had bee desirous or couetous of Copper, they might haue taken it from the Architraues and other Ornamentes in Portals in great abundance: but let it be as it will, there are Figures and tokens lame, which shew that there were Figures and tokens of metall standing thereon.



The third Booke.

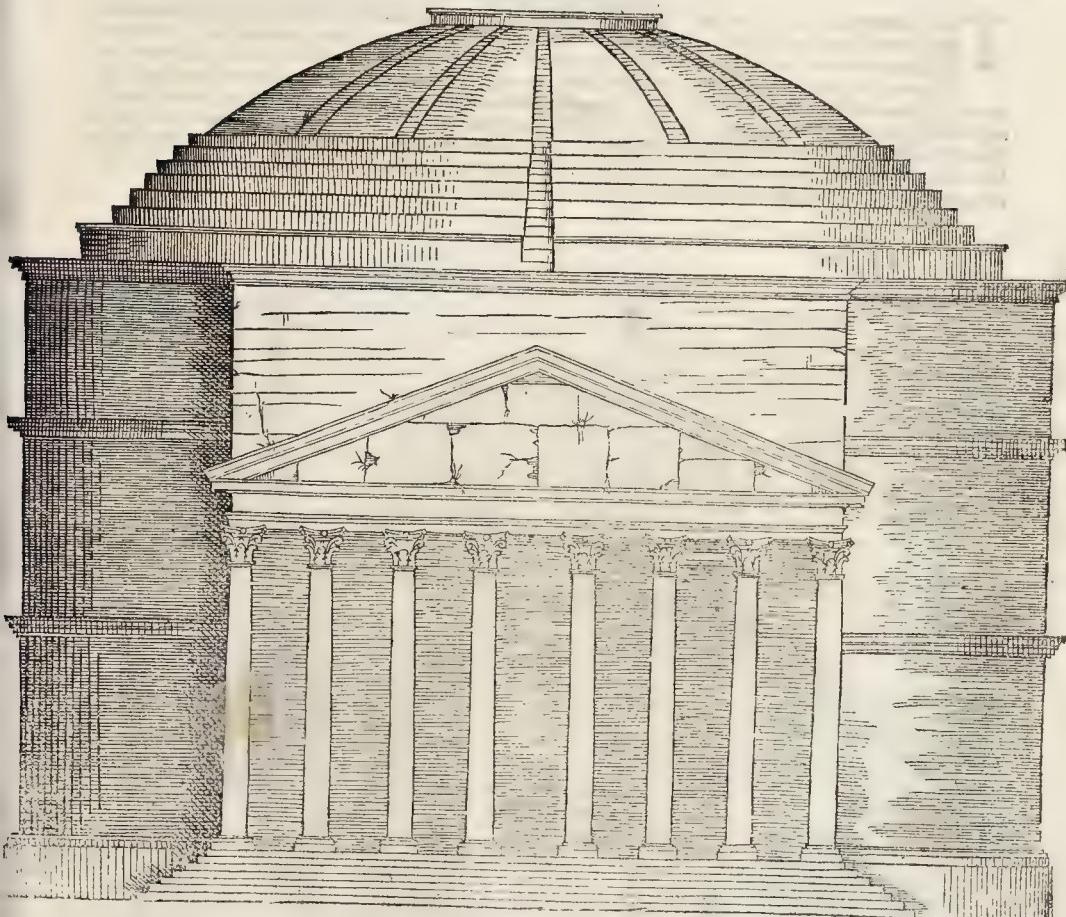
The fourth Chapter. Fol 3.

The inner part of the Temple or Pantheon.

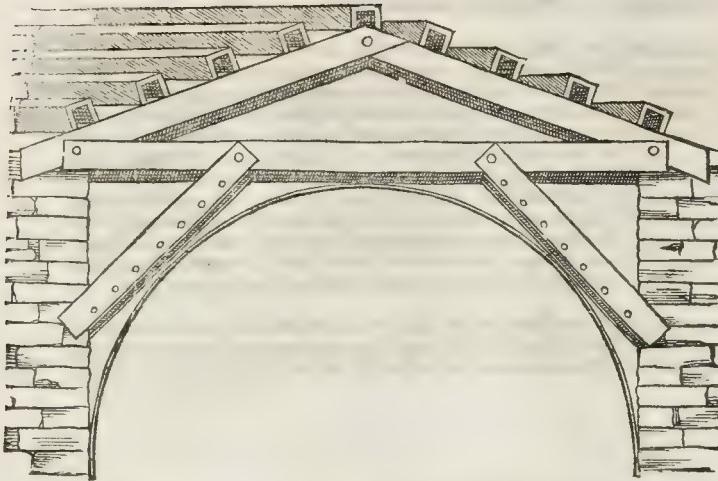
This figure following sheweth the Pantheon within, which forme (as I said) is taken from Sphera, because it is so wide from one wall unto the other, as it is high from the Pavement to the open place upon the top thereof; which widenesse and height are bothe a hundred ninetie and four Palmes vpwards - from the Pavement to the highest; and from the Cornice to the highest part of the rose is also the same measure, that is, each the hale of one hundred ninetie and four Palmes. The Quadrants in the rose are all like that in the middle; and it is thought that they were also beautified once with Silver plate by certaine remannts therof yet remayning to be seene: for if they had beene of Copper, they wold yet be seene there, or else those ouer the Portals wold alwaies haue beene taken away.

Let no man wonder that in these tyngs (requiring Perspective Arte) that there is no Pavement or other shortening seene, but I make it ouerly out of the ground to shew the meASURE of the height thereof, that you might not misse it by shortening: But in the Booke of Perspective Arte these things are shewed in their right shortening manner (and that in divers wayes) that is to say, in Superficies, and many bodies, and divers sortes of houses, serving hereunto: I will not now set downe the meASURE of Cornices downwards, for hereafter I will shew the Figures piece by piece, and thereof set downe a generall meASURE.

The Chappell in the middle, although here it sheweth well with the other worke, yet many men are of opinion that it is not ancient, because the Arch thereof wanteth the stee pillars, which is a thing never vied by good Antiquities; but it is thought that it was made greater in the Christians time, as the Christians Temples alwaies haue one painchall Altar which is greater then the rest.

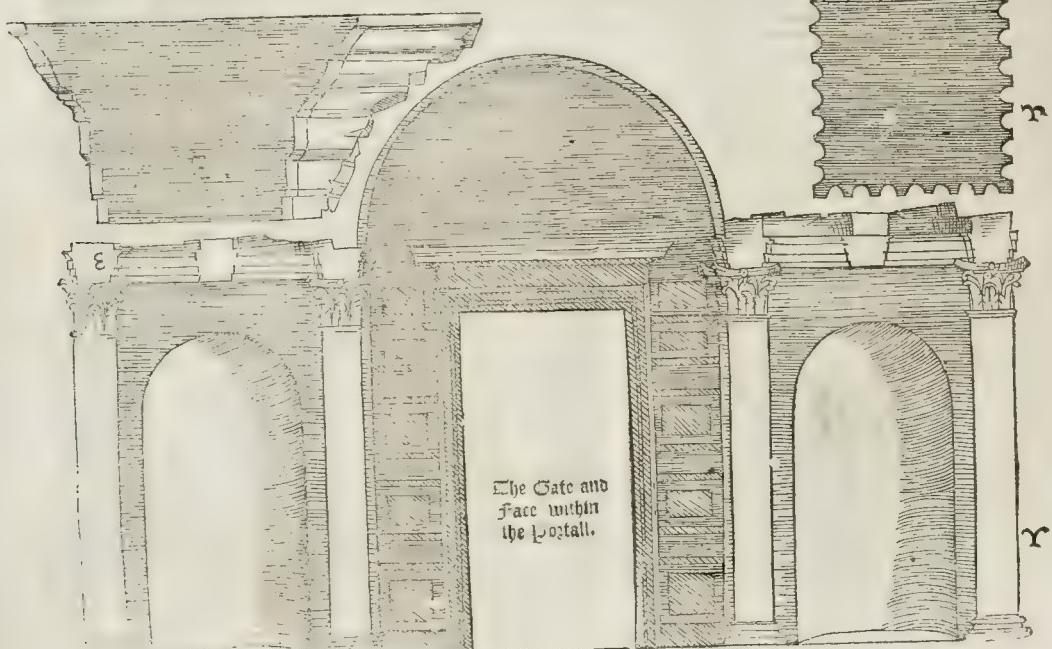


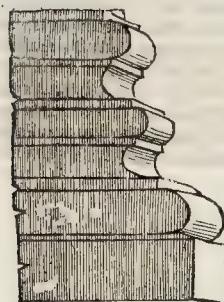
Of Antiquitie



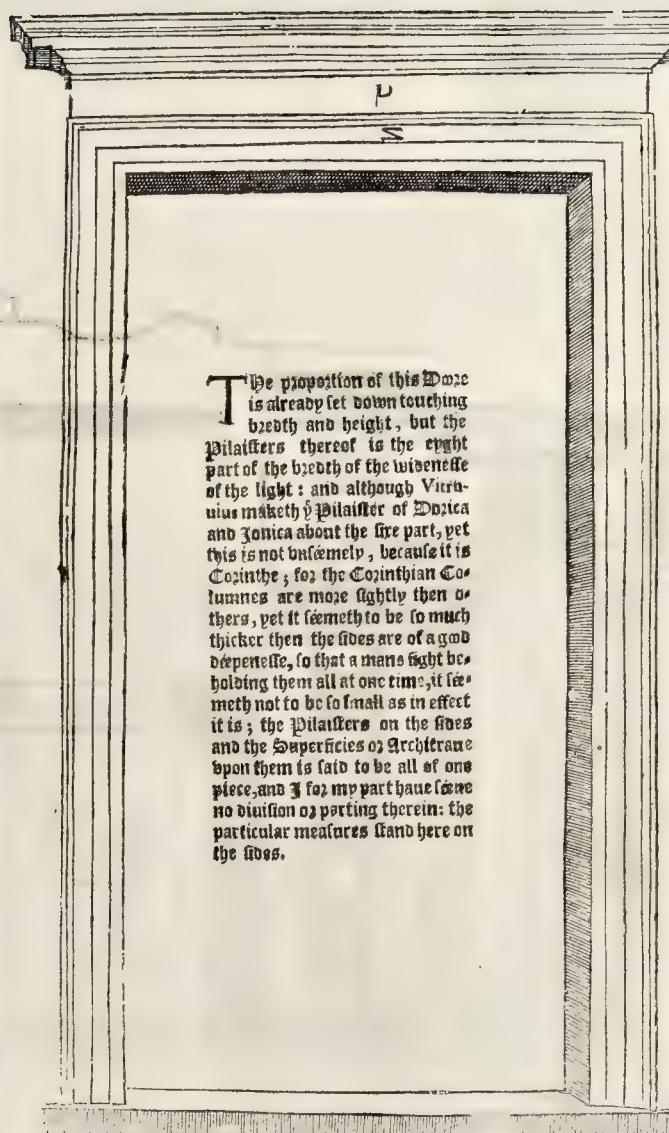
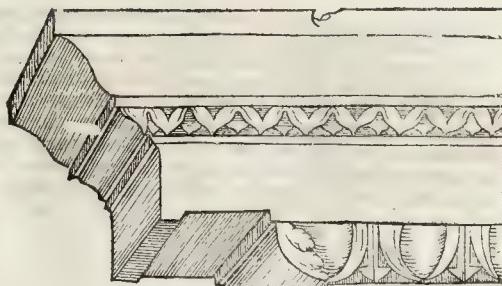
This Ornament is yet standing above the Portall of the Pantheon, which is made in this manner, all of Copper plates, the halfe Circle is not there; but there was a crooked Superficies finely made of Copper: and many men are of opinion that the beautifying thereof was of Silver, for the reasons aforesaid: but wherof it was, it is not well knowne; but it is true, it was excellent faire worke, consideringe that whiche is yet to bee seene.

THIS Figure here vnder set downe, sheweth the manner of the Portall within, the whiche both on the sides and before is well set out with Marble, and also without, althoþ by continuall of time is much defaced. The fourre Pillars are caned with such a number of Canels, as you see it here vnder set downe; and because this round Columnne is thinner above then the Diameter, where the edge or border of the Architrave is as thicke as the Columnne: If a man would make the Architrave equall with the fourre cornerd Pillars, which lessen not above, then the edge would haue had no Perpendiculer, for it would haue wanted as much as the lessening of the round Columnnes. Thus the skilfull workeman hath placed the Architrave so much right above the fourre Pillars, because such things shew well. Touching the dores, they are twenty Palmes, and two minutes wide, and fortie Palmes and fourte minutes high. Of the other severall measures I will hereafter speake at large.

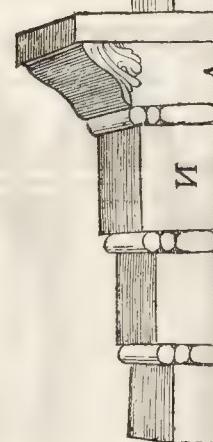




This Vale is one
of thos: which
standeth farr to
the flat Pillars,
in the second or-
der, which for
that they stand
farr from mens
sight, have one
Astagelus for
two, not to shov-
ten the worke.



The proportion of this Dore
is already set down touching
breth and height, but the
Pilaisters thereof is the eight
part of the breth of the wisenesse
of the light: and although Vitru-
vius maketh Pilaister of Dorica
and Ionica about the six part, yet
this is not unsemely, because it is
Corinthian; for the Corinthian Co-
lumnes are more lightly then o-
thers, yet it seemeth to be so much
thicker then the sides are of a god
depenesse, so that a mans sight be-
holding them all at one time, it see-
meth not to be so small as in effect
it is; the Pilaisters on the fnes
and the Superficies of Architrave
upon them is said to be all of one
piece, and I for my part haue seene
no diuision of parting therein: the
particular measures stand here on
the sides.

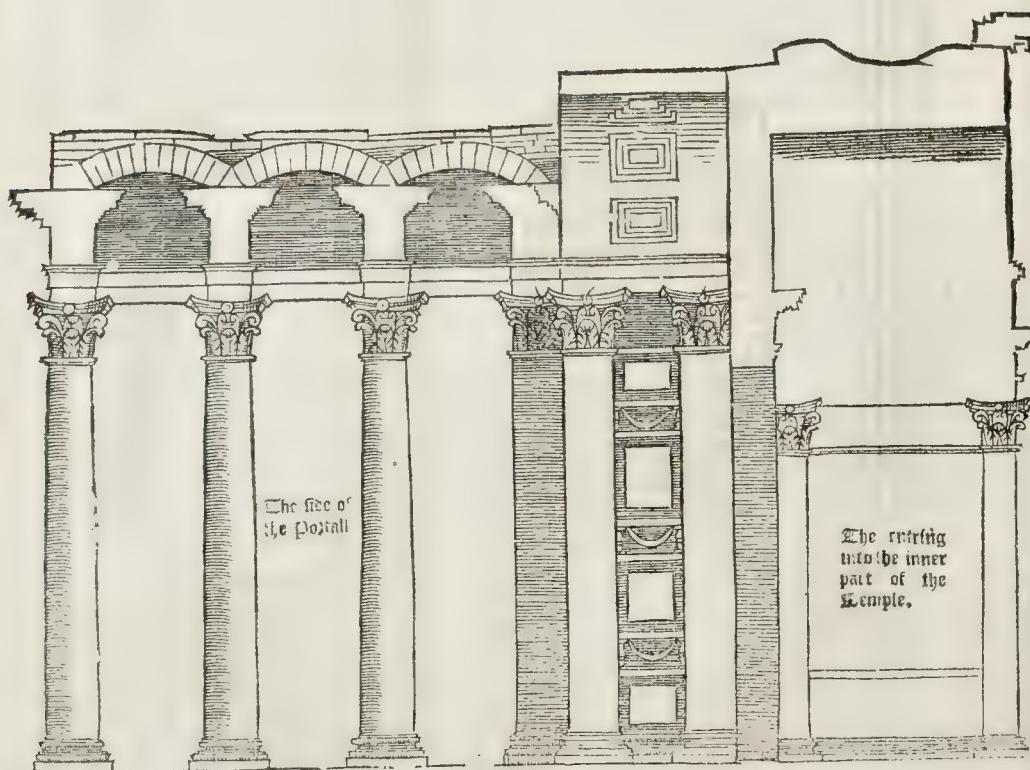


Ehe Cornice, Frise, and Archiv
trave stands above the Dore of the
Parthenon, touching the measure
thereof, the Architrave or Super-
ficies is the eight part of the light;
the Frise, because it is bncut, is a
third part lese then the Superficies,
the Cornice is as high as the
Superficies; the other members
are proportioned according to the
greateesse, wherby a man may
 finde the rest with the Compasse.

C

Of Antiquitie

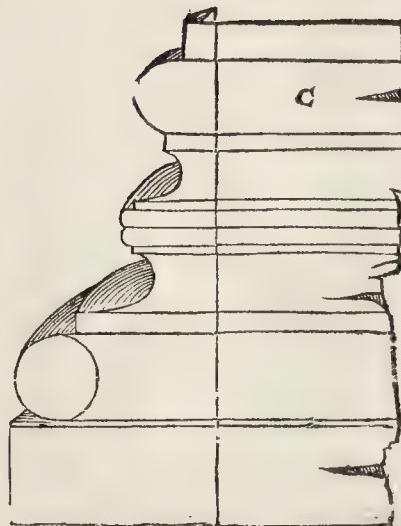
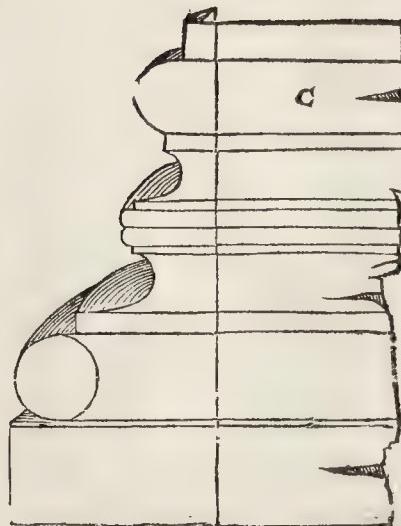
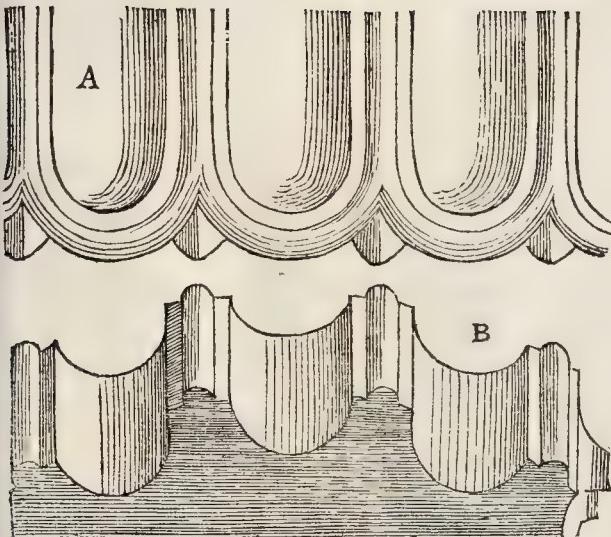
TO shew all the parts of this most excellent and beautifull piece of worke it is convenient to turne it on every side, and therfore having shewed the outside thereof maisterly as it standeth, with all the things whiche you se before: now will I shew the lodge, the Portall and the entring into the Temple, side wayes as it standeth. Touching the measure, the thicknesse, and the height of the Columnnes and the Pillars, it is before set downe, and therfore needelose to be rehearsed, it sufficeth only to see the disposition of the things within, whiche althoughe they be smal, they are drawne and proportioned in their measure according to the greatnesse. The small Pillars at the going into the Temple are foursquare, in manner of Pillarsters, the measure whereof I will hereafter set downe, for they are also at the Corners of the Chappels within round about the Temple, and as much as the space of these thre inter Columnnes holds, so farre reacheth the Copper rose, wherof I speake before.



The third Booke.

The fourth Chapter. Fol. 5.

I will not take upon me to write of every seuerall cutting or hollowing of the Columnnes whereof there are many in the Pantheon, but only of the Columnnes before the great Chappell, because they are very large and excellent worke, I will shew something, to the whiche end the Figures marked with A. and B. shew the outward worke of the grauing of the Columnnes of the great Chappell, that is, in the flat end in the uprightnesse and standing vp: touching the forms and the fashion it is sufficiently shewed in these two Figures; and thus will I shew you the measures thereof. The Canals are four and twenty in number, every Canall being nine minutes and a halfe broad, the Thorus with the two Quadrate or lists are both together fourteene minutes and a halfe, for the Thorus is thre minutes, and then there resteth a minute and a halfe, which divided into two parts, every Quadrate on either side is thre quarters of a minute. This hollowing pleafeth the beholders passing well, and such worke is upon the Bassica de foro transitorio, for the beautifing of a Gate, as it is shewed in the fourth Booke. The Vale marked with C. is the Vale of the layd Columnnes of the great Chappell in the Pantheon, whereof the height is two Palmes and eleven minutes and a halfe, which is in this manner diuided, The Plinthus vnder is nineteen minutes high, the vndermost Thorus is feuentene minutes, and the Quadrate above it is thre minutes and a halfe: The first Scorie or Trachile is eight minutes and a thir part, the Quadrate vnder the Astragal is halfe a minute, so is the other above the Astragal, the two Astragals are six minutes and a halfe, and so each Astragal is thre minutes and a quarter. The second Scorie or Trachile above the Astragals is fife minutes, the Supercrellie (so named by Vitruvius) or the Quadrate vnder the second Thorus is one minute: That Thorus is seven minutes and two third parts high, the Circite, that is the band of the Columnne above the Thorus, although the Vale be not one, is thre inches; the Projecture of this Vale is thre and twenty minutes proportioned in manner as it is here vnder shewed.

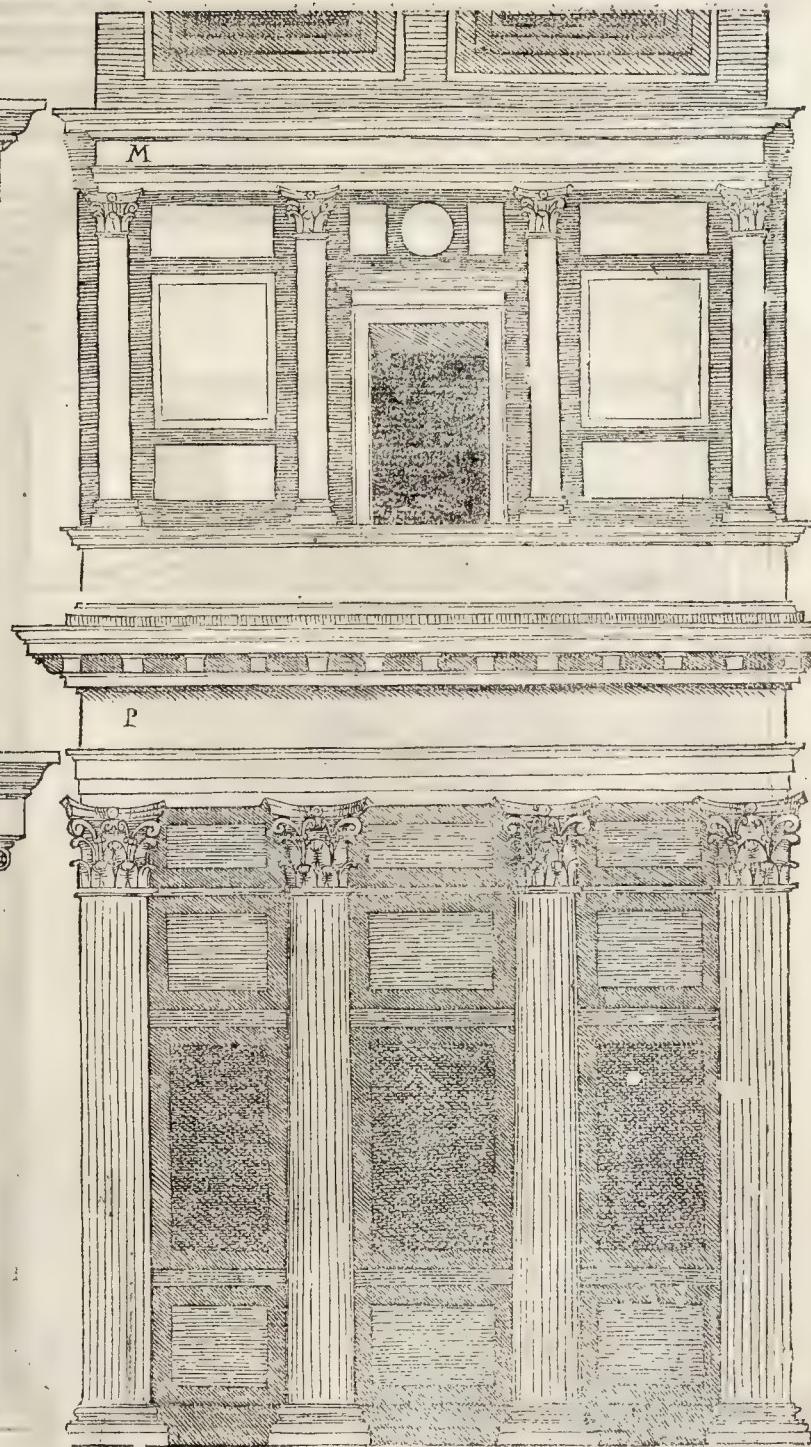


Of Antiquitie

This Figure following representeth a part of the Pantheon within, that is, from the Pavement till you come up to the second Cornice, which beareth by the Tribune or the round roose; and also above the Cornice you see the beginning of the four square hollowing of the said Tribune: This Figure also in the nether part sheweth the widenesse of one of the fire Chappells, whereof two are in forme of the halfe Circles, and the other four in forme of a Quabantangle; yet in shew they seeme all to be of one forme: each of these Chappells have two round Columnes, and the corners haue their seuer square Pillars, as you may see in the ground of the Pantheon aforesaid, and in this Figure following. And althoough it be not set in Perspective manner, whereby a man might see whether it were a round or four square Chappell, that is omitted because of the meature thereof; notwithstanding this is made for a four square, which you may see by the forme of the blind windowes which are within the Chappell; for the other shoulde runne more about. The thickenesse of these Columnes is five Palmes thre minutes lesse, the height of the Bases is two Palmes and one and twenty minutes, the height of the Columnes without the Capitals is fourtie Palms, the height of the Capitals is five Palmes and thirtie minutes; and so the whole Column with the Bases and Capitals: is fourtie and eight Palms high. The height of the Architrave, Frise and Cornice, are altogether thirteene Palmes and a halfe, and this height in all is deuided into ten parts, whereof three parts are for the Architrave; the other three are for the Sophero or the Frise, and the other four parts are for the Cornice: Touching the rest of the other members, I set downe no measures, because this is proportionably declared touching the principalest of them that stand on the side thereof marked with P. And in truthe, a man in this Cornice may perceiue the iudicious skill of the workeman, who therin touching the mullies, wold not cut any dentiles therein, thereby not to fall into that common error, by wherein many ancient workemen haue fallen, and at this day more moderne werkemen. The error I meane is this, that all the corneres wherein mullies stand, and bader haue dentiles cut in them are vicious, and by Virtuous are reected in the second Chapter in his fourth Booke: and although that in this Cornice the forme of dentiles are, notwithstanding, because it is buncut, it is not to be contredicted in this respect. Above this Cornice there is a Podium, or a manner of bearing out, whereof the height is seven palmes and five minutes, which commeth not farre out, for the Pillars stand not farre out from the Wall: the height whereof, together with the Architrave, Frise and Cornice, is fourtie Palmes and five and thirtie minutes, which height being deuided into five parts, the one part shall be for the Architrave, Frise and Cornice, the which Architrave, Frise and Cornice proportioned according to the greatness, stands marked with the letter M. In this Cornice, and also in the Architrave, the members are so well deuided, part cut, and part buncut, that it darke[n]eth not the forme thereof, but rather the more, becaus[e] buncut members are mixed with the cut members, and so you see a wonderfull grace in them: the window above the Chappell is to gaine light to the same Chappell, whiche light, although it be not principall, nevertheless, because it is radially drawne vp from the uppermost open place, it giveth the Chappell the due light: betweene the pillars, and also above the windowes, there are many fine stones intermired, and the Frise of the first Cornice is fine profil Stone.

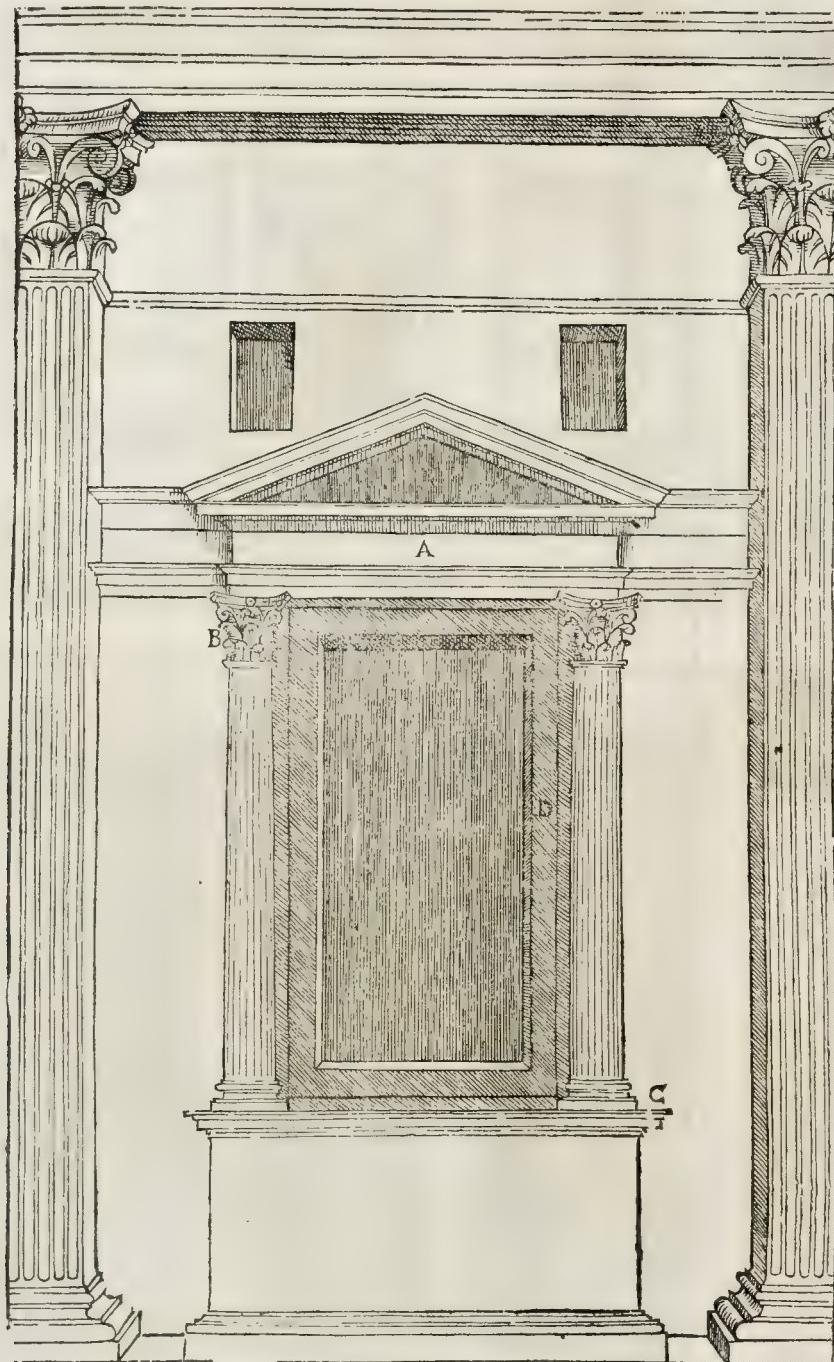
The third Booke.

The fourth Chapter. Fol. 6.



Of Antiquitie

This Figure sheweth one of the Tabernacles which stand betwene the Chappels, and the Pillars on the sides represent the four square corner Pillars of the Chapples, here againe you may see the notable judgement of this workeman, who seeking to ioyne the Architrave, Frise and Cognice close to the wall, and marking that the four square Pillars standing on the sides, were not so farre distant from the Wall, that a man might make the whole Picture of the Cognices therein: therefore hee made the Scine theron, and the rest of the other members hee turned into a Fastre, whereby the work was more stately and accompanide with order. The stile of the Tabernacle is 9. Palms and 11. minnutes high, the thicknes of the Columnes are two Palmes, the height sixteene Palmes without Bases or Capitalls, the Bases are one Palme high, the height of the Capitalls are two Palmes & a halfe; the Architrave is a Palme, & Frise also is as much, which is also of fine profil, but the height of the Cognice is a Palme & a halfe, the frontispiece is 5. Palms high, & Architrave above the two greatest Pillars, is a Palme and thre quarters, the other measures that hereafter be shewed; & of these Tabernacles there are thse with sharpe gueuls, and thse with round gueuls, that is the fourth part of a Circle.



The third Booke.

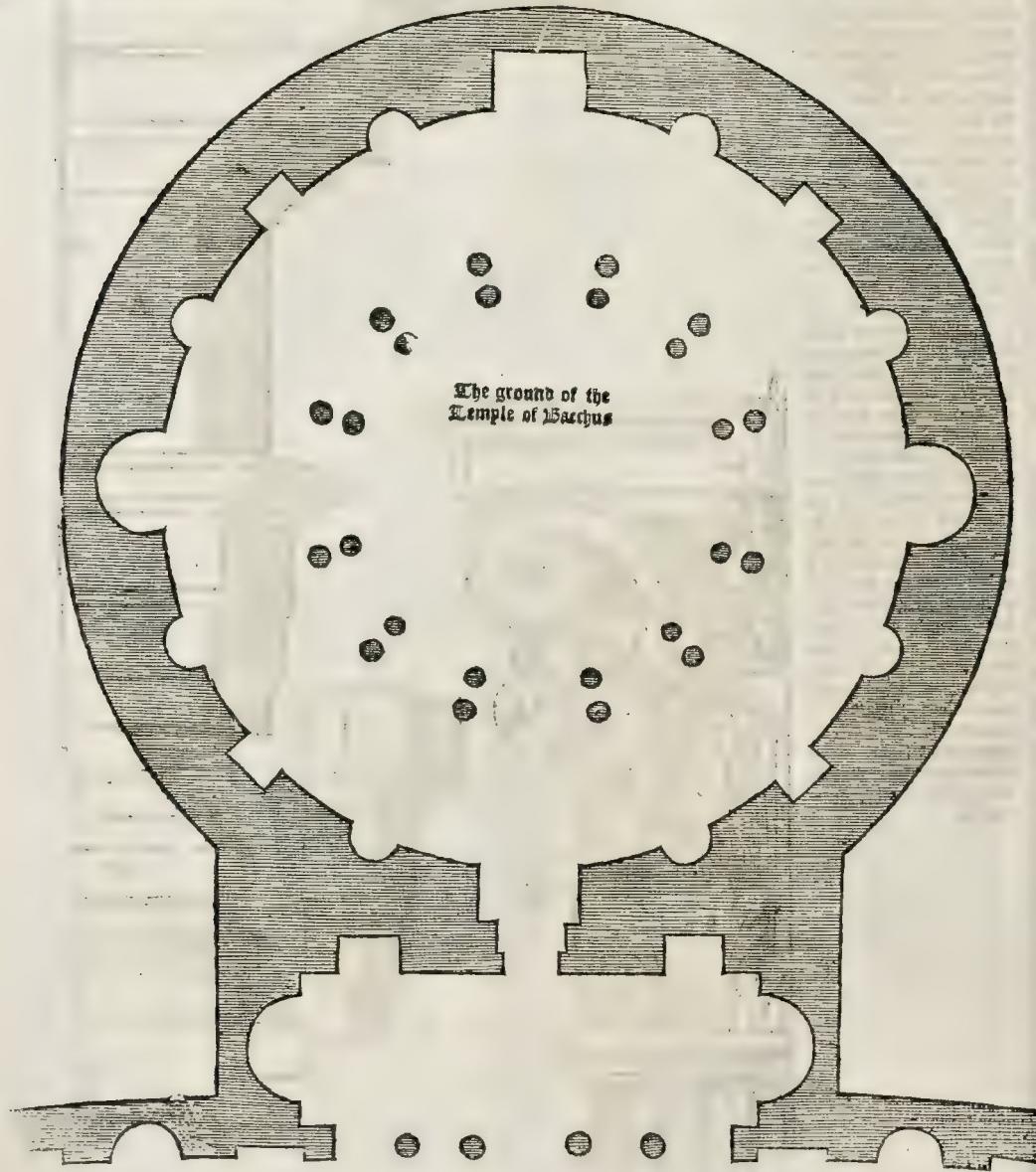
These forme Figures hereunto annexed, are members of the Tabernacles in great; as the letters A. B. C. D. shewe them. Touching their measures in height, it is shewed before, and for the rest it is sufficient for the workemen that all things from member to member are set out in great, and proportionably with great diligence hought into this forme, although it may bee that such as study Vitruvius will thinke this Cornice to bee too high for the proportion of the Architrave and Fræse; and I for my part would not make it so high, but to see the same in a place that hath great distances, and which standeth not very high, if therewch to bee in god proportion. The Capitall is farre from Vitruvius order of writing, for it is higher without the Abacus, than Vitruvius maketh it with the Abacus: notwithstanding, according to common opinion, they are the sayest Capitalls that are in Rome, (and not onely the Capitalls of the Tabernacles) but they also of the Chappels are of the like forme, and those of the Pozzafall also in such forme, that I judge (as I said at the beginning) that I haue not found a building of greater observation of order then this: but if I shold write all that are in it, both within and without, I shold peradventure be over tedious, wherefore I will make an end of this wonderful Building, and speake of other Antiquities.

The fourth Chapter. Fol. 7.



Of Antiquite

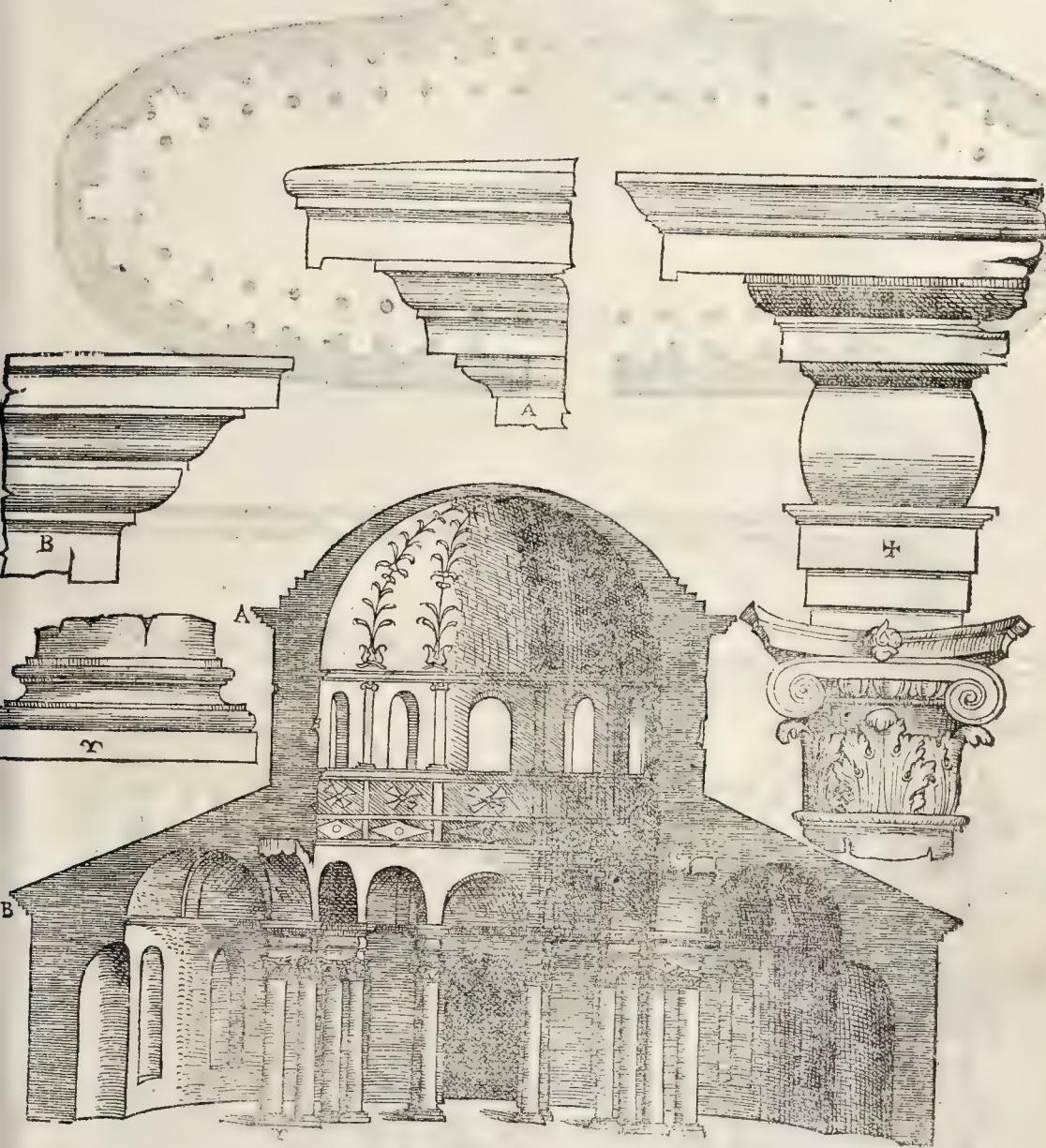
This Temple of Bacchus is very ancient, and also whole enough, and also for stroke, say; enclose of stones, Plaster, both in the Piers and in walles, also in the Tribunes or round roses in the middle, and in the roose of the round walke, made altogether after the manner of Composita: the whole Diameter within from Wall to Wall, is 100. Palmes long, whereof the middlemost body set about with Pillars, containeth 50. Palmes: in the intercolumnies I find great difference to likynge one to the other, because that the middlemost intercolumnies or spaces betwene the Columnes where you come in, and out of the Portall are 9. Palmes and 30. minutes, and the other eight over against them are but 9. Palmes and 9. minutes: those that are over against the greatest Chappell are 8. Palmes and 31. minutes, and the other four Columns setting hold 7. Palmes 8. minutes, and some 7. Palmes 12. minutes. The widenesse of the entry within and of the four cornered Chappell over against it, follow the intercolumnies, and so doeth the widenesse of the two great places round Chappells their intercolumnies. The other places of Chappels are 7. Palmes and 5. minutes broad. The measure of the Portall before may be taken by the measure of the Temple, which Portall is round Roos'd: just cut before the Portall, there was a walking place made in forme of an Egae, which was 588. Palmes long, and in the middle it was 140. Palmes broad; and as it appearith by the decayed monuments, it was full of Pillars, as it may be seene in the Figure.



The third Booke.

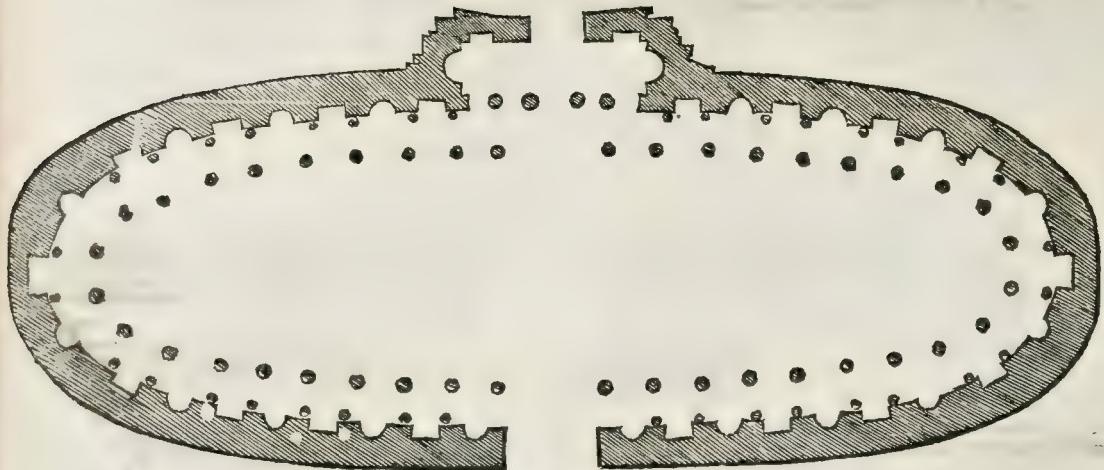
The fourth Chapter. Fol.8.

Here before I shew the ground of the Temple with the measure thereof, now in this Figure I will shew the Perspective thereof within, for without it is wholly deserd; the heigh from the Pavement to the uppermost part of the roose is 86. Palmes, the thicknesse of the Columnes is two Palmes and 14. minutes; the height of them is 22. Palmes and 11. minutes. The height of the Base is one Palme and 7. minutes. The height of the Capitall is 2. Palmes and a quarter. The height of the Architrave is one Palme and a quarter, so much also the Frise holdeth. But the height of the Cornices are two Palmes and a halfe. The particular members, as of the Bases, Cornices and Capitals, you see here under proportioned, according to their greatness, and marked in their severall places. This Temple standeth without Rome, and is dedicated to S. Anne.

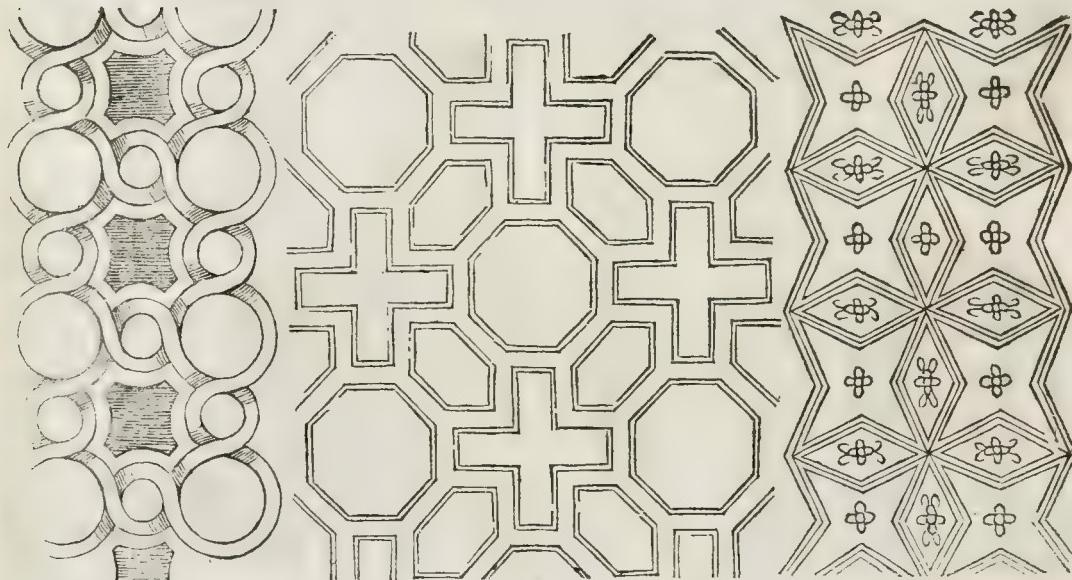


Of Antiquitie

THIS Archigraphie hereunder placed is the aforesayd walking place before the Temple of Bacchus, with a ledge round about it, as you may perceive by some very ruinous places therof, and all about betwene each intercolumnie there was a place or seat beautified with small pillars, where it is thought a certaine 3000 stede, (and as it is sayd) this walking place was made Duale wise, yet very long as of 588. Palmes and 140. Palmes broad.



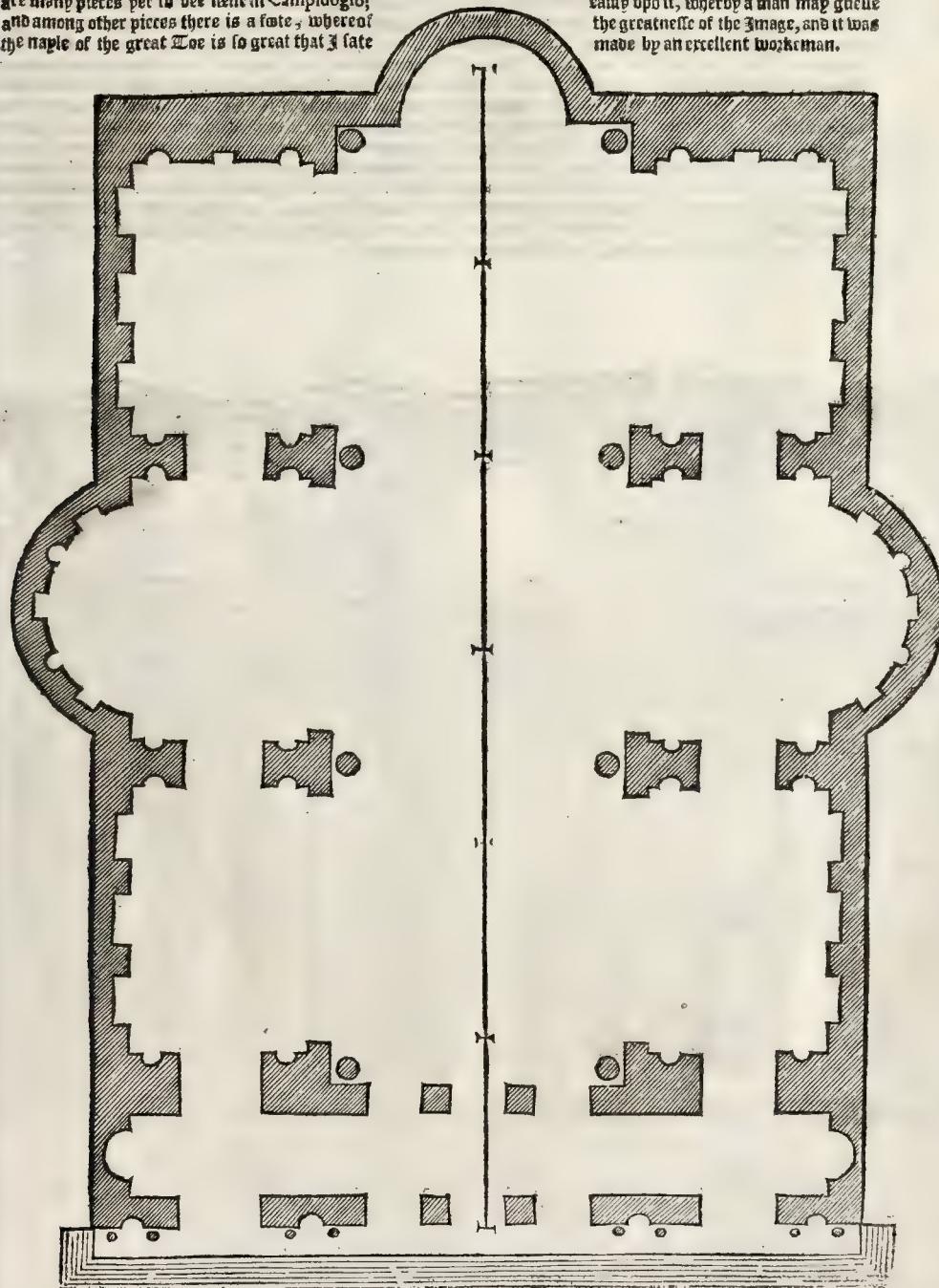
The Temple of Bacchus (as I sayd) is full of many Ornements, and of divers Compartmentes, whereof I have shewed some part, but not all. The three inventions hereunder placed are in the same Temple, some of faire stone and the other of Pilaister.



The third Booke.

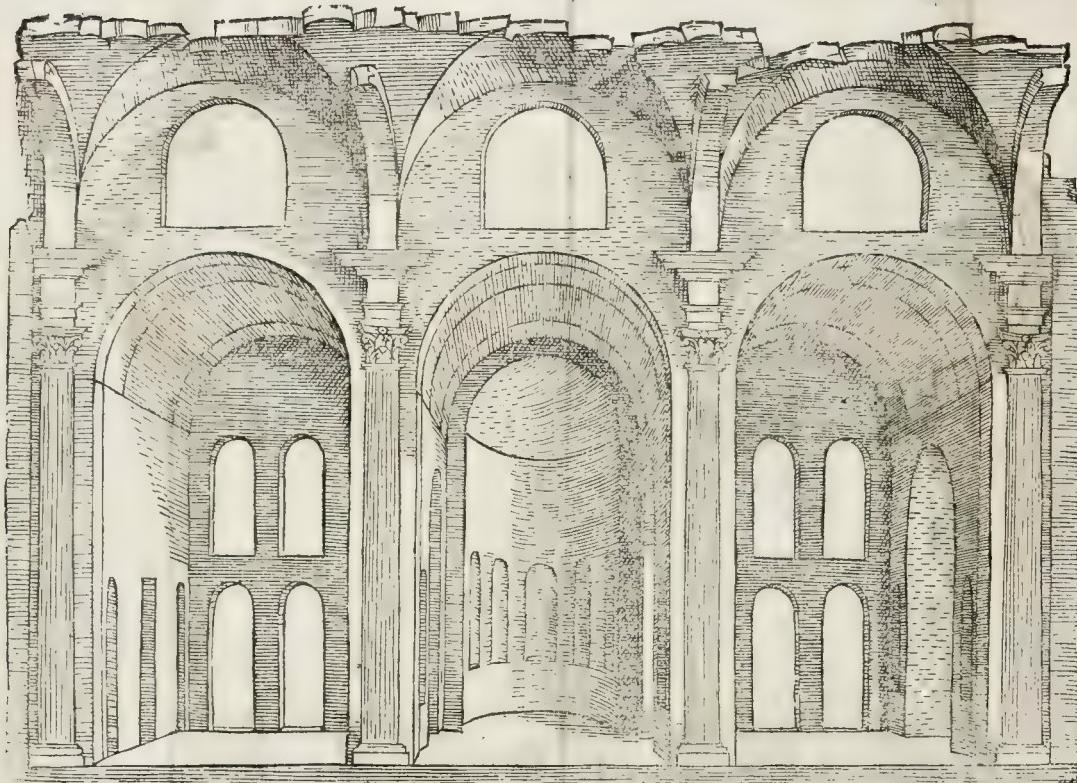
This Temple of peace the Emperor Vespasian caused to bee made by the Markeit in Rome, which Temple is commended of Plinius; for it was much beautified with grauen woorke and Pilauiss of Stucco; and besides these Ornamente of the said Temple, after the death of Nero, Vespasian caused all the Images both of Copper and Marble to bee placed therein, whiche King Nero had gathered together out of diuers places, which were in small number. Vespasian also placed in it both his owne and his childrenes Images made of a new kind of Marble brought out of Ethiopia, called Bassalio, being of an Iron colour, a kind of stiffe much commended in those tyme. In the said Temple and the principall Chappell thereof, there stood an Image of white Marble very great, made of many pieces, of whiche reliques there are many pieces yet to bee seene in Campidoglio; and among other pieces there is a fote, whereof the nape of the great Toe is so great that I late

The fourth Chapter. Fol. 9



Of Antiquitie

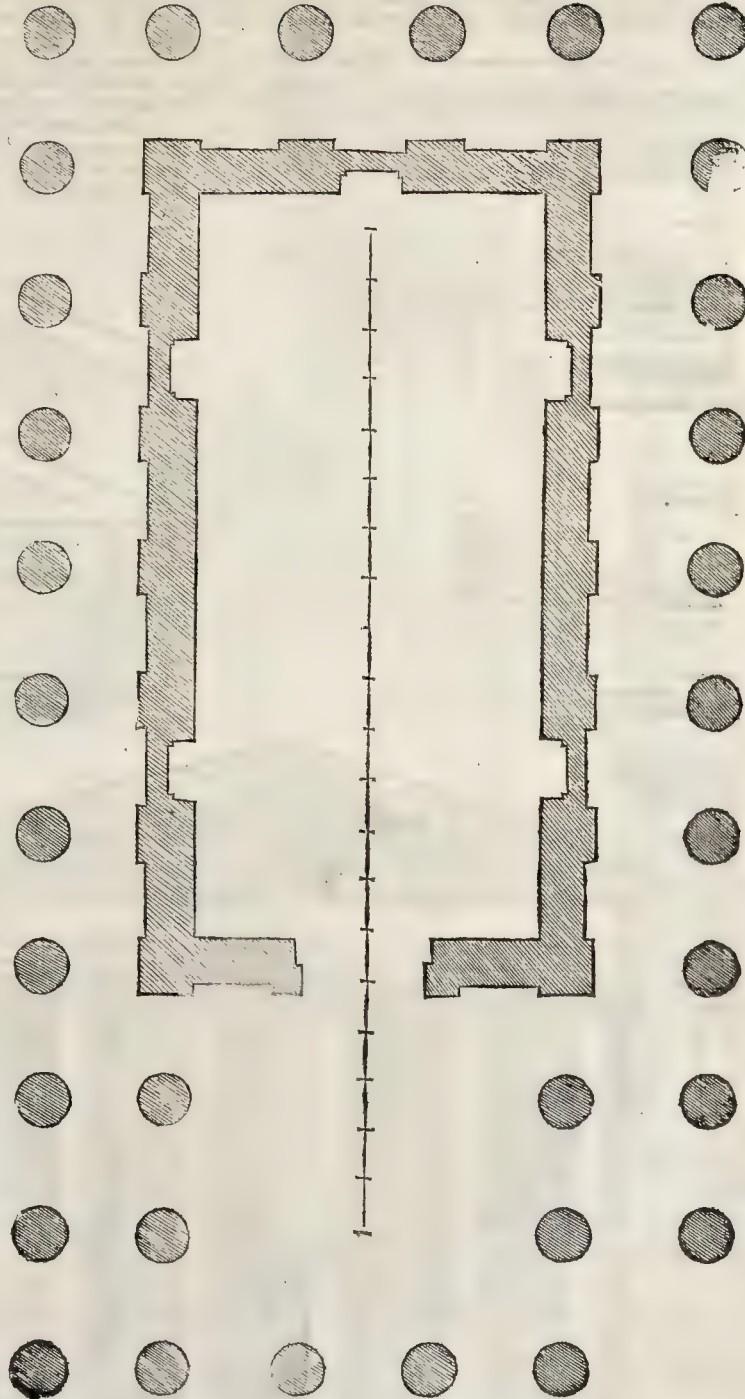
This Temple is measured with Elles, and the Elle is divided into 12. parts, called ounces, the measure which standeth in the middle of the ground of the Temple is halfe an Elle: First, the length of the lodges about is 122. Elles, the breadth is 15. Elles, the widenesse of the places before in the lodges containe 10. Elles, the thickenesse of the Pillars at the entrie is five Elles, and betwene the one Pillar and the other is 10. Elles, the goings in on both sides, both of the Porch and of the Temple are 15. Elles wide, the length of the whote Temple is about 170. Elles, the breadth containeth 12 5. Elles; the principall place in the middle of the Temple is 35. Elles. The sides of the Pilasters against the whiche the round Columnes stand are 9. Elles and a halfe, and the thickenesse of these Columnes are 4. Elles, 4. ounces and a halfe, and they are canclerit, every one having 24. Canells: the cane or hollowing of each Canell is 5. ounces broad, and the litle therof of one ounce and halfe; the breadth of the principall Chappell is about 32. Elles, and is halfe a Circle. Those on the sides marked A. B. are 37. Elles broad, and goe 16. Elles into the Wall, which is lesse then halfe a Circle: the thickenesse of the Wall round about the Temple is 12. Elles, althoug in many places, because of the Holes, it is much thinner. The Circumfences of the Chappells are 6. Elles thicke, betwene the one Pillar and the other, it is 45. Elles; you may conceare the quantite of the meaure of many places and wonderre with other particular things, by the measures aforesayd, for the Figure is proportioned. Touching the Drotographic, which is the Figure hereafter following, because the ground is all couered over with the ruines thereoff, I could not measure it from the ground to the top, but as much as I conceived by that part of the ground, and all of the ruines which are ther to be seene; I make this piece standing upright. I am not certaine whether the Columnes have this pedestal under them or not, because that men cannot see the soe of the Columnes. And although that Plini much commendeth this Building, yet there are many unhandsoome things in it, specially the Cornices above the Columnes, which are not accompanid with any thing, but stand bare and naked alone.



The third Booke.

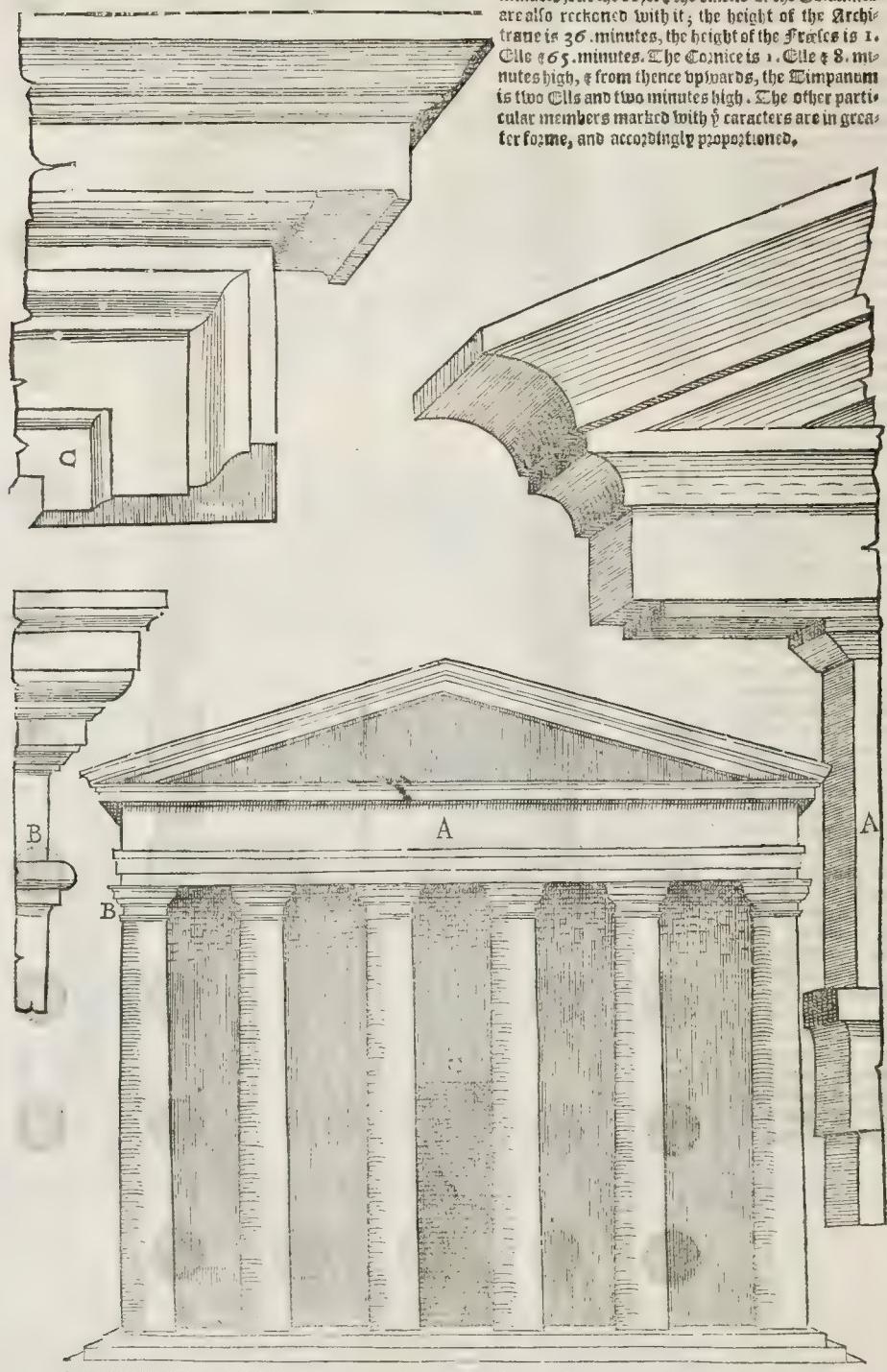
This Building is called Templum Picatii, it is made altogether of a kind of rough stone, which is there called Tiburium, after the River of Tiber; but for that the stone is spongy and full of holes, it was covered all over with a kind of Plaster called Stucco, it is very ruinous, for therein you see no proportion of windows: neverthelesse, I have placed them in the ground where I thought them fittest to stand. This Building is measured with an other Elle, which is divided into 60. minutes; the line through the middle of the ground of the Temple is the third part of the said Elle: First, the Columns are an Elle & 18. minutes thick; the intercolumnies 3. Elles and 14. minutes, the breadth of the gates is 4. Elles and 14. minutes and a half, the thickness of the wall is one Elle and 20. minutes, the length of the Temple is 18. Elles and 20. minutes, the breadth of the Temple is 8. Elles and 30. minutes; the Gallery round about the Temple was flat roofed with four square parchees: but how the broad place before the Temple was raised I cannot conceave, because it is so ruinous. The columns of this Temple have no bases nor any Corinthian, or Proiecture, but stand bare upon their ground, & well made of Tiburium, and covered over with Stucco. This Temple had the fratsespice both behind and before,

The fourth Chapter. Fol. 10.

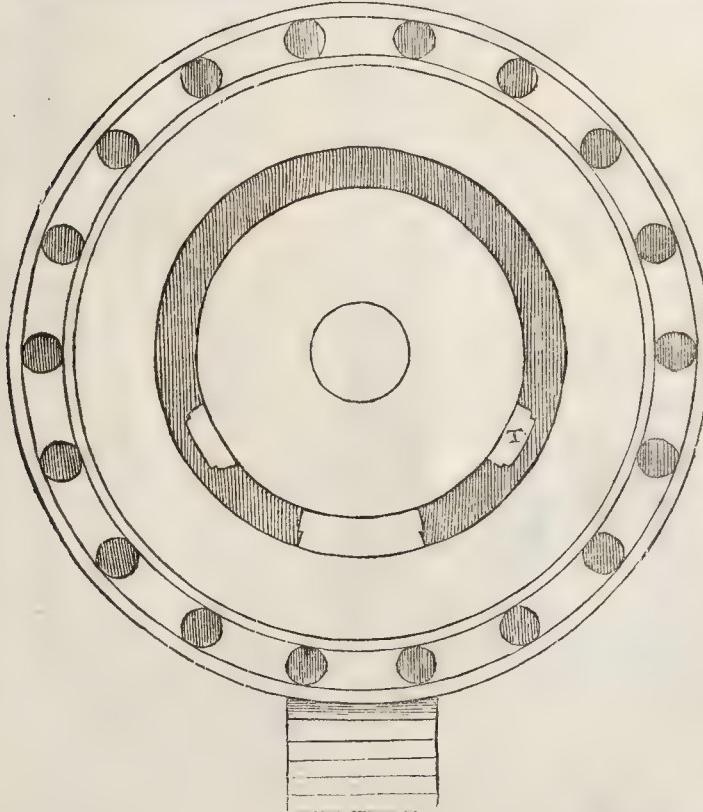
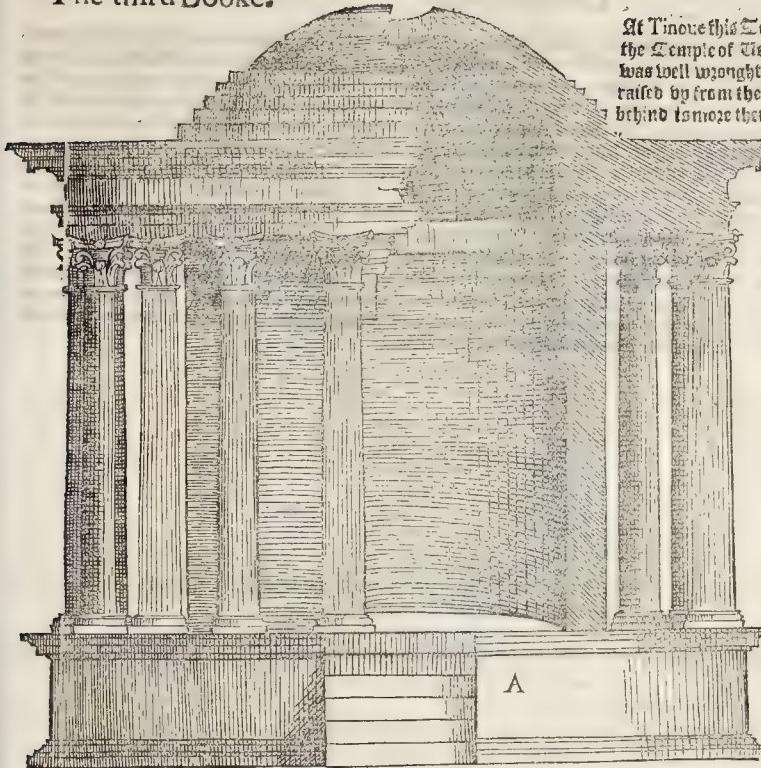


Of Antiquitie

The height of the Colamns with the Capitall is 3. minutes less then 10. Ells, the thicknes below (as I say before) is 1. Elle and 18. minutes; and the thicknes above is 1. Elle and 15. minutes. The height of the Capitalis 47. minutes, but the bezel & the cinctie of the Columnes are also reckoned with it; the height of the Architrane is 36. minutes, the height of the Frieles is 1. Elle & 65. minutes. The Cymice is 1. Elle & 8. minutes high, & from thence upwards, the Timpanum is two Ells and two minutes high. The other particular members marked with h caracters are in greater forme, and accordingly proportioned.

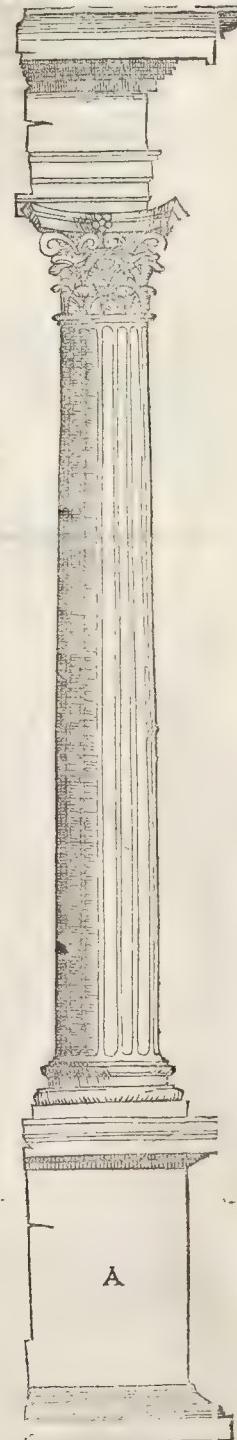


The third Booke.



The fourth Chapter. Fol. 11.

At Tinoue this Temple standeth upon a River; it is called the Temple of Tella, the most part therof is ruined; it was well wrought a farre of Corinthia manner: before it is raised by from the earth as the Wall thereof standeth, but behind is more then 7. Elles of Wall under the Wall.

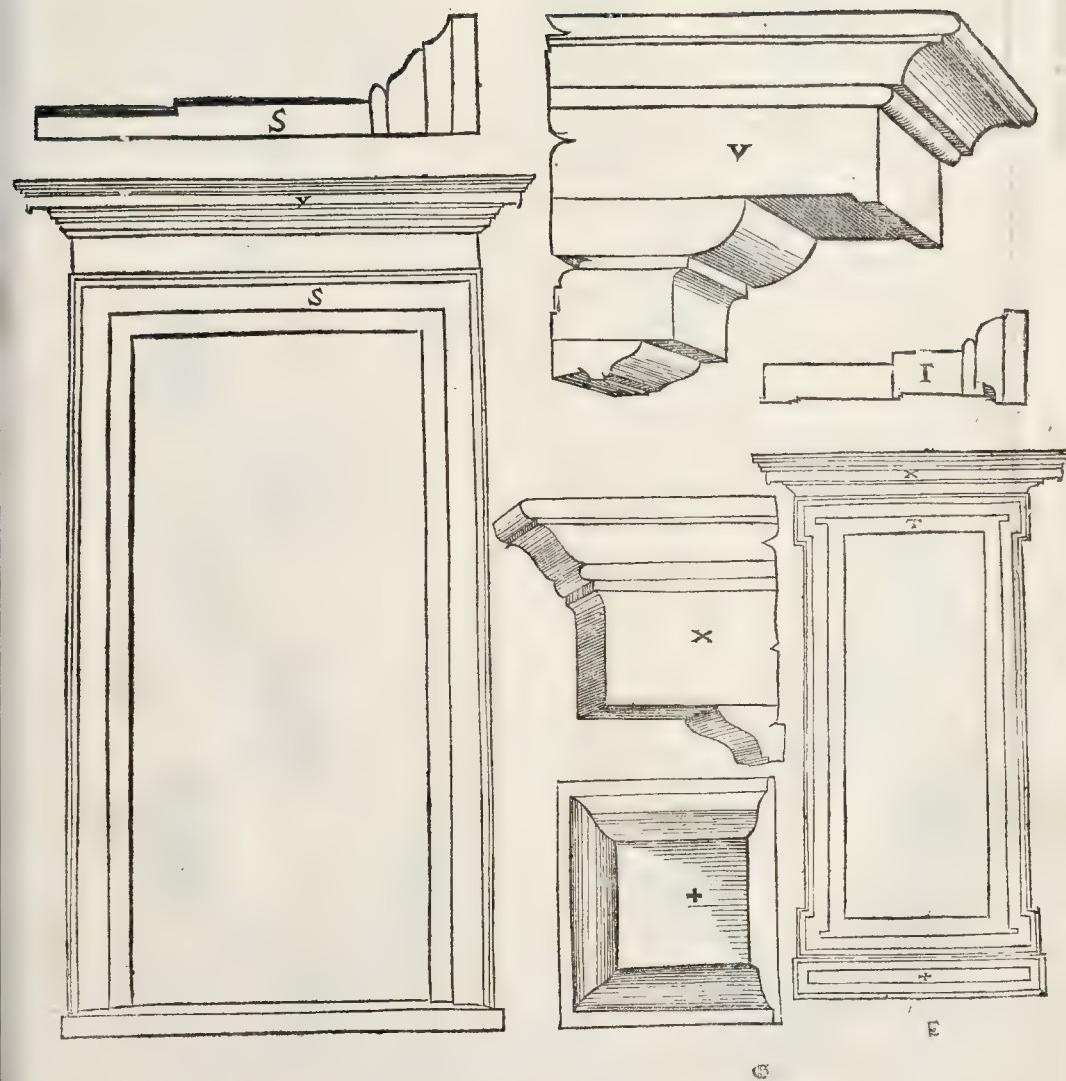


Of Antiquitie

This last Temple is measured with the last Elle of 60. minutes, and first, the Columnnes are one Elle and 17. minutes thick, the intercolumnnes 2. Elles and 34. minutes; betwene the Columnnes and the Wall is 2. Elles and a halfe, the thickenes of the Wall is an Elle and 13. minutes, the Pavement of the Temple within is 12. Elles and a halfe: the Pedestall marked A, with the Columnnes and their ornaments serue for the whole oder of the Temple. The height of the Base or the Pedestall is 45. minutes, and the field of the Pedestall is 2. Elles and 48. minutes. The Cornice is 37. minutes and a halfe high, the height of the Base of the Columnnes is 38 minutes and a halfe, the Tronc of the Columnnes is 10. Elles high: the Capitall is an Elle and 24. minutes high. The Architrave, Frise and Cornice all together are about two Elles and a halfe high. The Doore marked with S. Y. is 9. Elles in height, the breadth of the light bower is 4. Elles 4. minutes, but the widenes above is 3. Elles 54. minutes, the whiche is lessened above according to Vitruvius doctrine. The Antepagmentum is 52. minutes and a halfe broad, but the Supercilie (because of the lessening) is but 51. minutes; the Frise is 30. minutes high, and the Cornice 24. The Window marked with T. X. is one Elle 46. minutes and a halfe broad, the height containeth 5. Elles 3. minutes, and is lessened above, as the Doore is. The Antepagmentum is 31. minutes and a halfe broad, and the Cornices containeth as much, but the other particular members, are in greater forme marked with the same letters set by them, and well proportioned: This Window is wrought both within and without.

This is the third part of the common Elles of 60. minutes, wherewith the Temple aforesaid, and this also is measured.





Of Antiquitie

Without Rome this ruinous Temple standeth, and for the most part is made of Bricke; yet so none of these ornaments therin which I have here placed in Figure; but as it may be conceaved by the ground thereof, and also considering the proportioned height, it was made of that fashion as the pieces marked A. B. standing by the ground doe shew. Thus we haue the measure of the Ichnographic of the ground of the Temple, by the which measure a man may conceave the worke of the Orthographie: & his Ichnographic or planesse, is measured by the olde Romane Palme: and first the doore of the Temple is 24. Palmes wide, the Diameter of this Temple is 69. Palmes and a halfe: the two places on the sides are as wide as the Doore; the Doore of the lesser Temple is also of the same breadth, so are the four Chappells also wher men goe in, of the same widenesse, but backward they are wider, because the walles of the side runne to the Center of the Temple, and those four Chappells (as it may be conceaved) receive their ligths from the sides: the Diameter of the small Temple is 63. Palmes long, the little Chappells, both they that are hollowed out, and thole that are elevated, are 15. Palmes broad: but of those two elevated or rayled Chappells, I cannot tell hwo they ended above, for there standeth not so much bygght as a man may conceave any thing therofe fainly, but onely a beginning above the earth; and (as I haue laid) although a man cannot see in what maner this Building stand above the ground, yet according to my concept, I haue made this Orthographie. And therefore on the one side marked B. representeth a piece of the great Temple, and the other marked with A. sheweth a part of the lesser Temple.

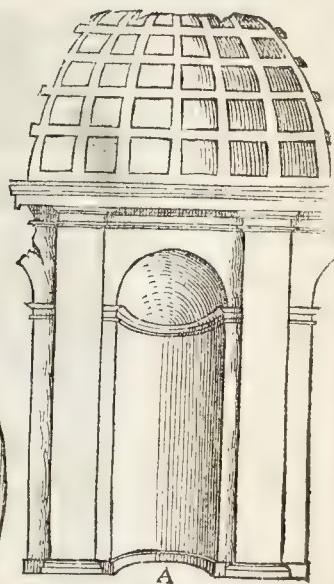
The old Roman Palme of 12. fingers, and 48. minutes;

The third Booke.

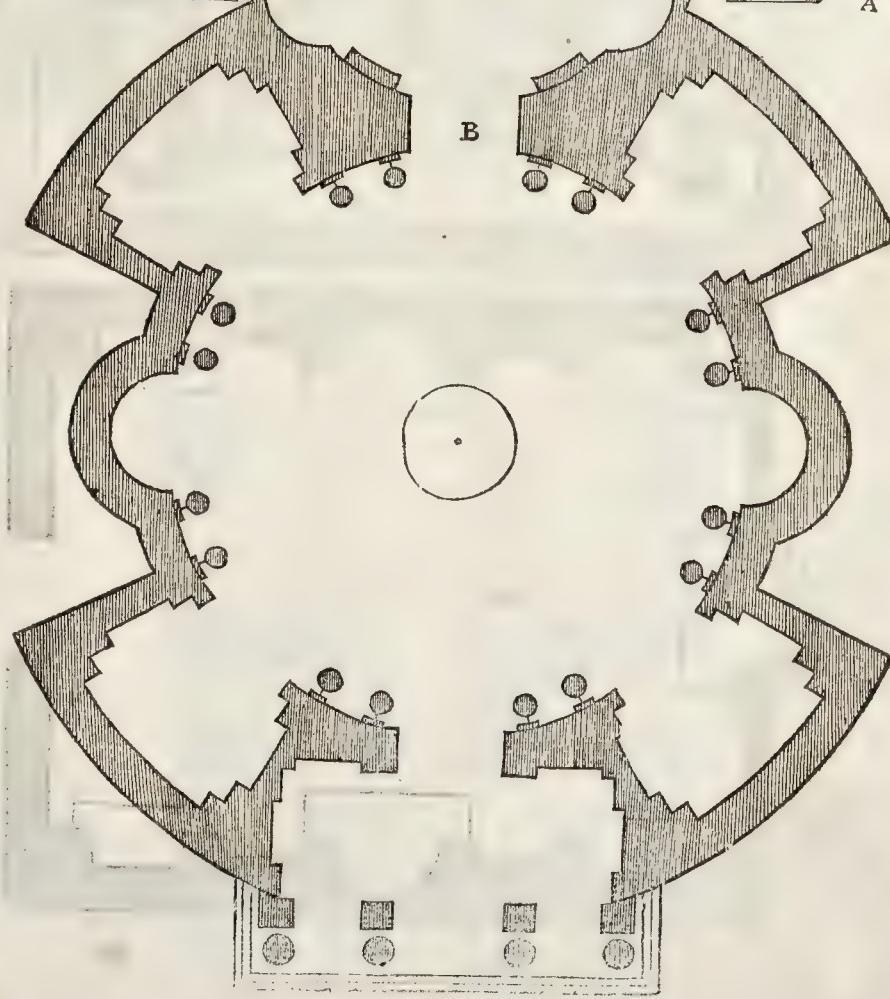


B

The fourth Chapter. Fol. 13.



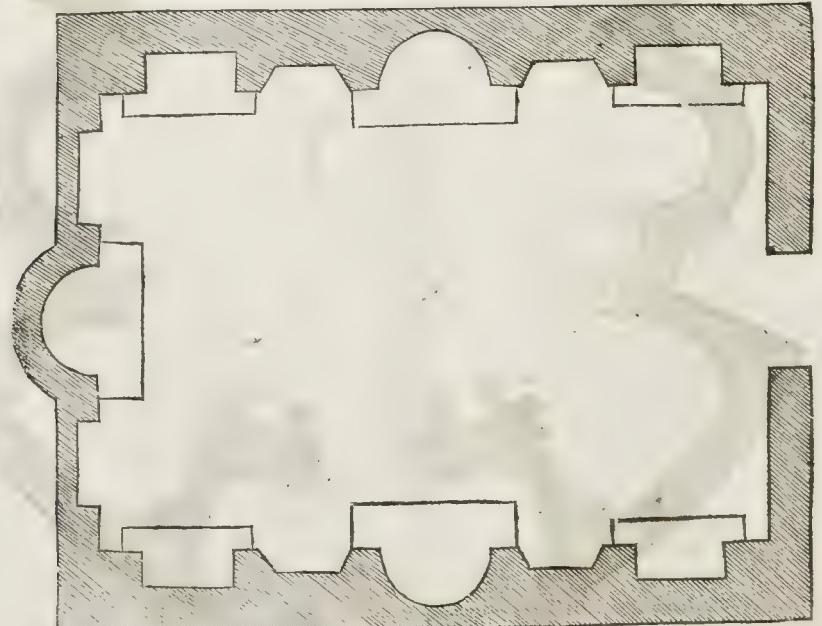
A



B

Of Antiquitie

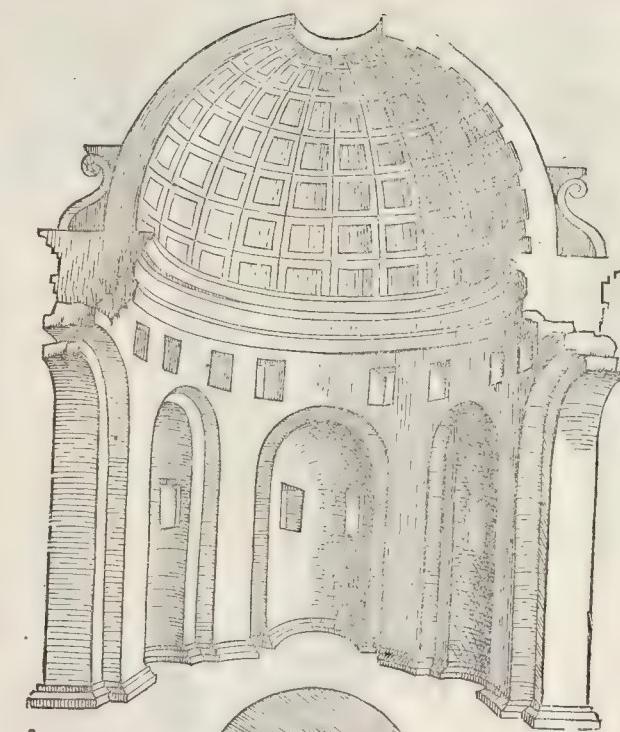
This Temple placed under this is without Rome, and is very much rainted, and so the most part is made of Bricke, it is not very great, it cannot also be discerned, that it had any light in it but at the doores, and from the windoles abone the Cornices. And all the rest of the holes were placed for Idols or such like things; the meature of this Temple was lost by the way, but yet I remember well that the Temple was a full Quadrant and a halfe, as well on the ground as aboue, therefore I set downe no other measure, but a skilfull workeman may helpe himselfe therewith by invention.



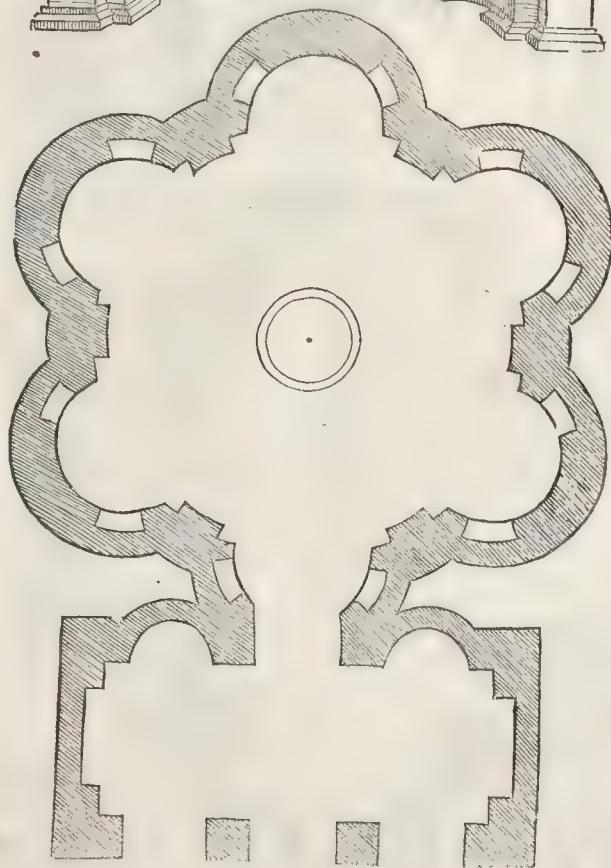
The third Booke.

The fourth Chapter. Fol. 14.

This small Tempel is of no great compas, and all made of Briche; it is measured by the olde Romanes Palme, the length of the lodge or Gallerie is 40. Palms, the breth therof is 16. Palms, the Dooze is 10. Palms, the places in the walles whiche, are all of one widnes, that is, 14. Palms; the space between them is 6. Palmer, the rest may bee guesst by sight; for I guess the heigh from the Pavement to the Architrave to be 40. Palms, and the Architrave, Frise and Cornice to bee 9. Palms: and touching the rest, I made ac-compt that if I allow-ed a Palme byright for the round rofe, then the whole Tempel shoulde about 70. Palms.



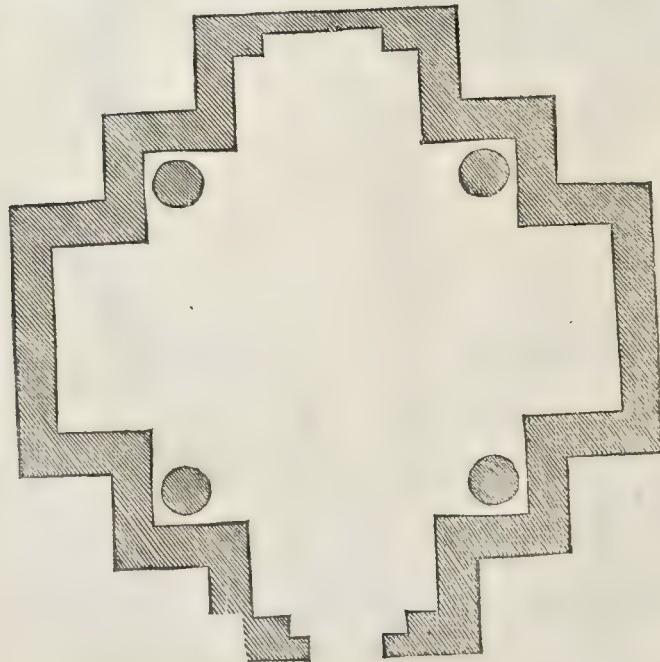
The ancient Roman Palace.



Of Antiquitie



This Temple is without Rome, made part of Marble, and the rest of Brick, it is much decayed, it is thought that it was a Sepulchre, and on all sides it is right four square; fro the one Wall to the other is 30. Palmes broad, the thicknesse of the walles is 2. Palms and a halfe, the wideenesse of the Chappel is ten Palmes, the Dore is five Palmes broad, the height of the pillars with walles and Capitalis is 22. Palms and a halfe; the thickenesse of the Pillars is not much above two Palmes: The Architrave, Frieze & Cornice are 4. Palmes high, from the Cornice to the height of the roose is 11. Palmes: the height of the Botom of the Chappel is 20. Palmes.

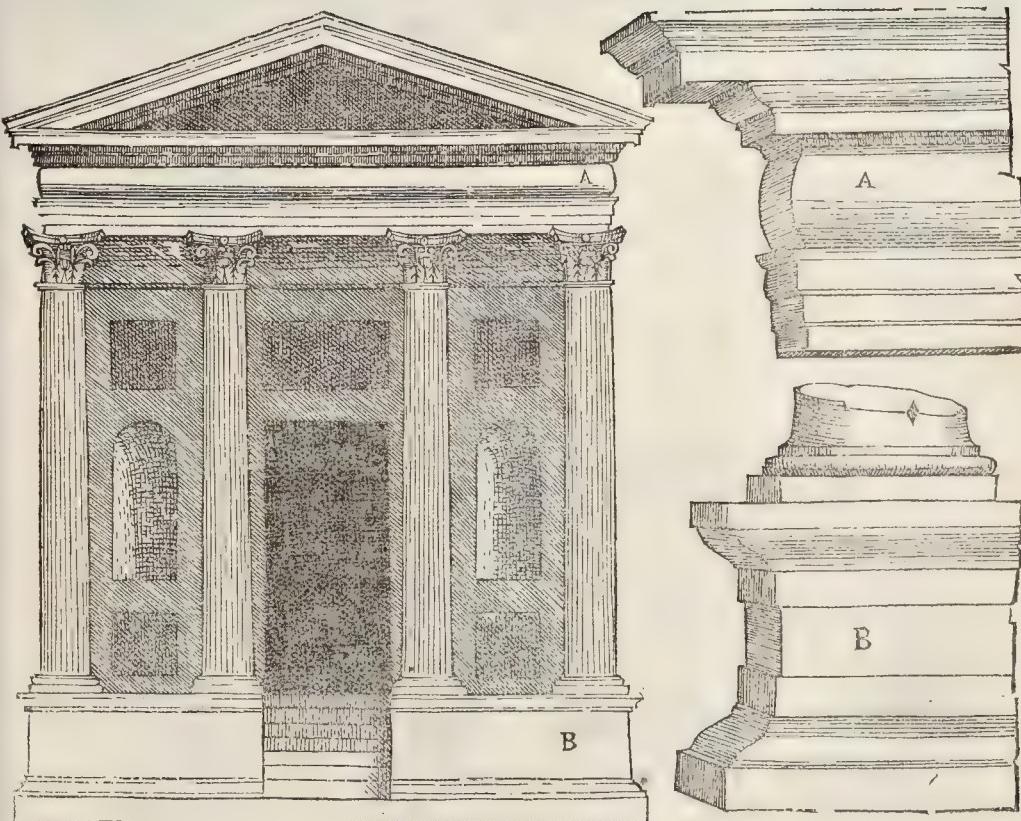


The third Booke.

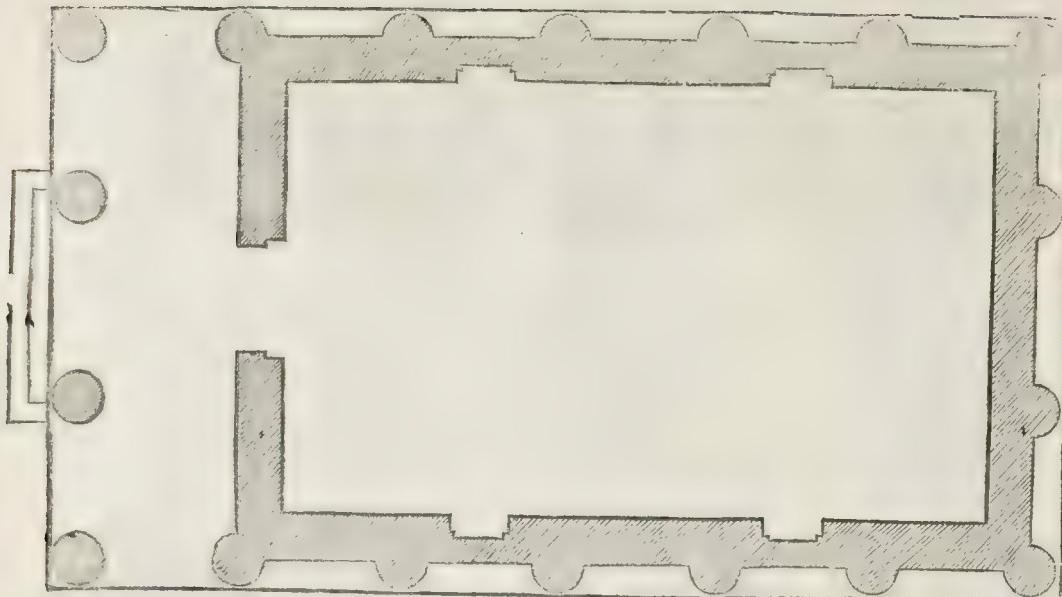
The fourth Chapter. Fol. 15.

This Temple hereunder set downe is A Tivoli by the River, much decayed, which had the frontispice before and behind the Columnes, on the sides are more then halfe without the wall; the widenesse of the Temple from the one wall to the other, is 11. Elles measure by the same measure that Tempium pccatis is measured withall, the length of the Temple is 8 Elles, the thicknesse of the wall is one Elle and 11. mantes, the thicknes of the Columnes of the Portall is an Ell and a third part, the height of them with Bases and Capitals is about 12. Elles, the height of the Architrave, Frise and Cornice is thre Elles, the Frontispice from aboue the Cornice to the height is 3 Elles, the height of the basement is 3. Elles and a halfe. In the Façie before, there is no shew of a Doore, nor of any places in the Wallis, by reason of the ruinousnes thereof, but I have drawne it out thus, to make the more shew, because I indgo it had bene so; neither can you see any windowes in the walles nor sides, nor yet behind, although I have placed them here in the ground, where I thought best. The measure of the members both of the Basement and the Cornices aboue, I will not name particularly, for they are proportioned according to Antiquitie, whereof you may see some parts.

The third part of the Ell aforesayd.



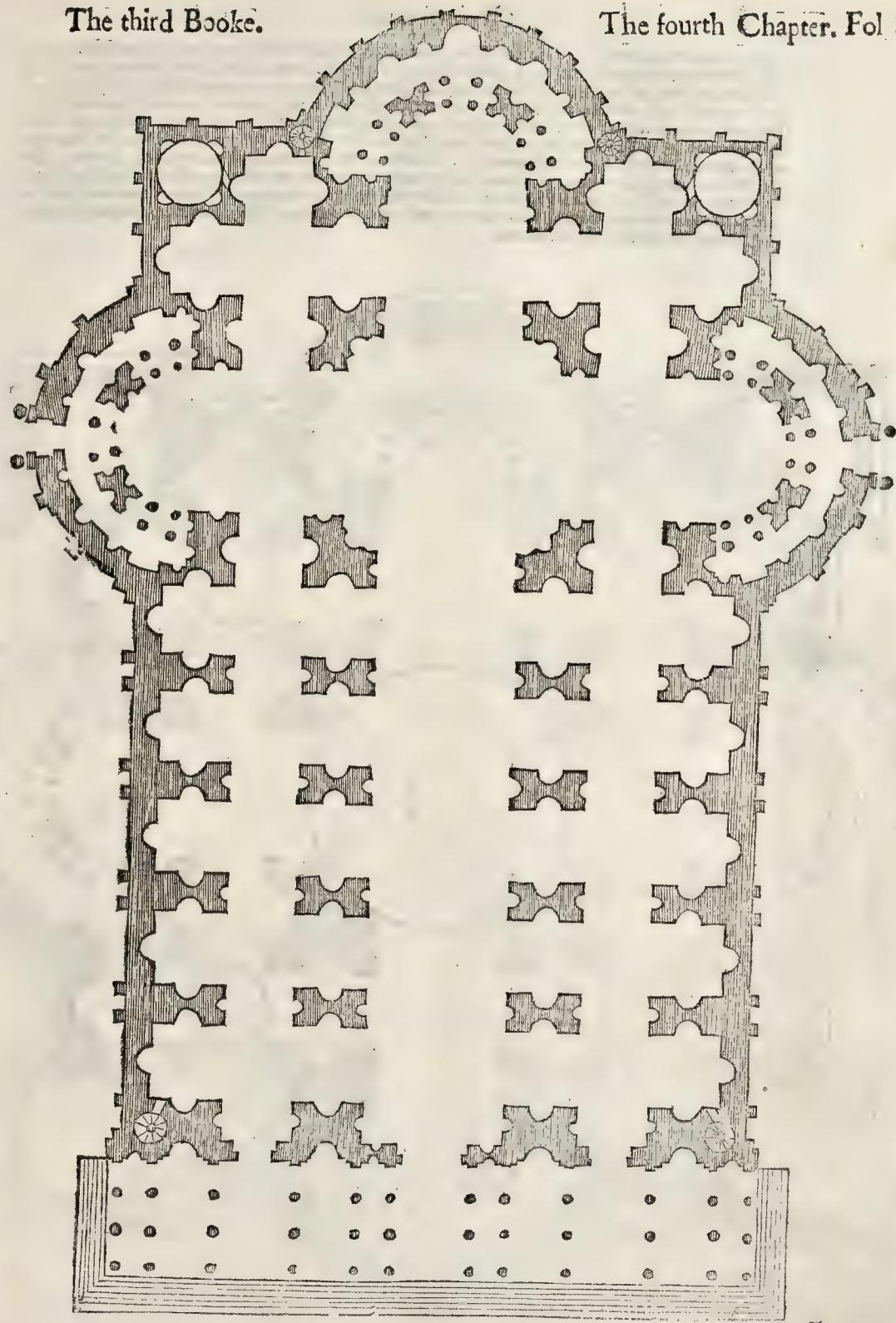
Of Antiquitie



Although at the beginning of this Booke, I said I wold speake only of Antiquities, yet I will not omit withall to speake of few newe thinges made in our time; and specially, because our age hath flourished with so many good workes for inuention of Architecture. There was in the time of Pope Iohannes the second, a workeman called Bramante, who is thought to haue bin the Dvlladome of Vrbis, who was a man of so great understanding in Architecture, that he would be ffit to rayle of the works of the auncient portaments which the Pope gaue him; that he rayled by good Architecture or no. And for a man at that time full then had been hidden and kept secret: which Bramante in his time louing the estimation of the poore wchell house of S. Peters Tempel in Rone, but being preuented by death, did not come to haue it done, but first moost thereof also was left unperfected, whiche in divers ingenious workmen sought to be filled, and haue bothe yeare of and to haue it; and amongst them others Raphael Durbin, Painter, a man also very skilful in Architecture, wchell Bramantes stoyrs, made perfect this draught, the whiche in my opinion is one of them, and amongst other that are to be found out of it, which the auncient worke man may helpe himselfe in many things. The length of the same is 100. foote, and the breadth 60. foote, and the height 40. foote. And the meane of the length and breadth is 80. foote. The Compt. 110. yds. per foyre with the old Thomas of Padua, and the broadest walkes therein 1. 92. palmers breede, y. & c. of the doore are but halfe as much: by these two measures you may guesse the rest.

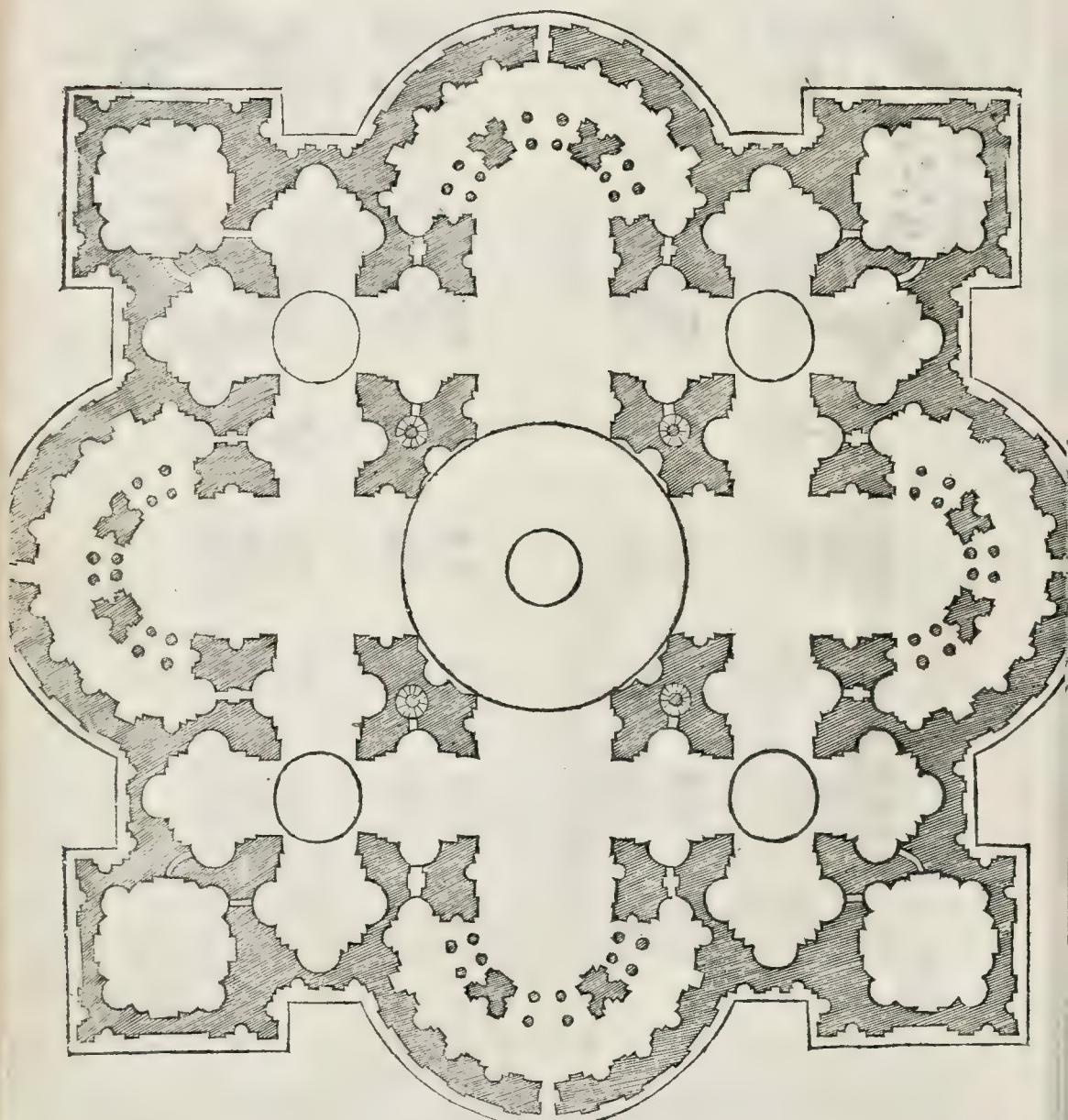
The third Booke.

The fourth Chapter. Fol 16.



Of Antiquitie

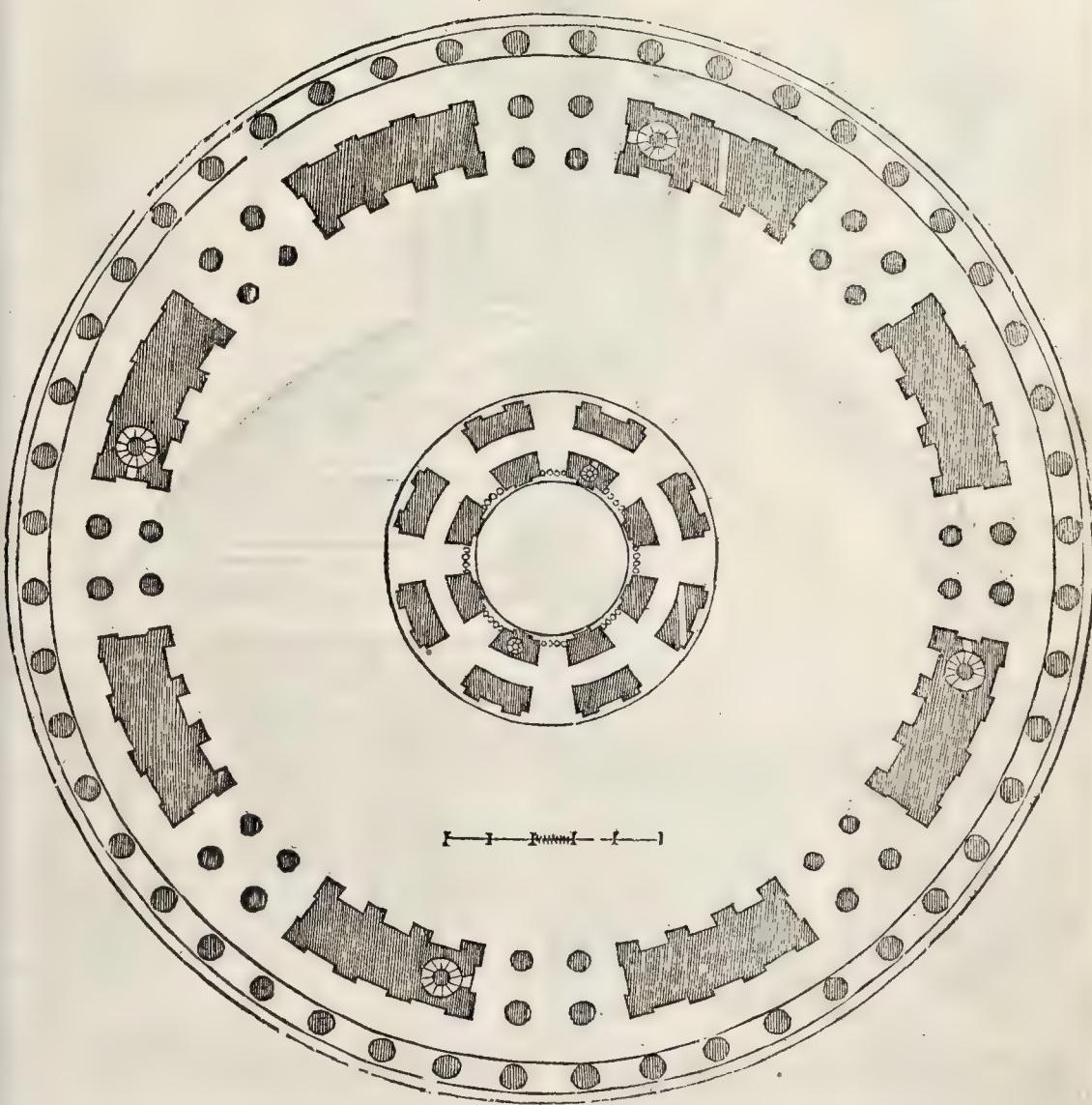
¶ In the time of Iulius the second, there was in Rome one Balthazar Petruio of Sienne, not onely an excellent Painter, but also very skilfull in Architecture, who following the doctrine of Bramant, made a modell in forme hereunder set downe: whose meaning was, that the Temple should have four gates to go into it, and that the high Altar should stand in the middle thereof: at the four Corners he made four Sacrifices, vpon the top wherof men might place the Clock-towers for an ornament thereto; and the first part or Face thereof looked into the Citie. This Temple is measured with the olde Romane Palme, and first, it is in the middle from one Pilaster to another 204. Palmes, the Diameter of the Circle in the middle is 184. Palmes long. The Diameter of the four small Circles is 65 Palmes. The Sacrifices are 100. Palmes wide. The four Pilasters in the middle make four Bowes or Arches which beare up the Lanthonne, and these four Bowes or Arches are all full made, which are in height 220 Palmes, and above these Arches a Tribune excellently set forth with Columnes, with a round Roote vpon it, which Bramant shewed before he died, wherof the ground is here set downe.



The third Booke.

The fourth Chapter, Fol. 17.

The Figure hereunder set downe, is the ground of the Tribune that shold haue gone aboue over the fourre Bowes or Arches (as I sayd before) whereby a man may perceiue, that Bramant in such case was bolder to draw a piece of worke, then circumspet therein; because so great and malle a piers of wroke shold haue an excellent foundation to stand very fast, and not to be made vpon fourre Bowes or Arches of such an height. And soz confirmation of my spach, the fourre Pilasters, and also the Arches without any other waight vpon them, are already settled and suncke, yea, and rent in some places: Neverthelesse, because the inuention is fayre and cosily, and a thing to give good instruction to a wroker man; I thought it good to place it here in a model: but not to be tedious in setting downe the meaures, I will shew some of the principall; the rest you may fitte with the small Palme which standeth here within the ground, which length containeth 50. Palmes: the thickenesse of the first Columnne without, is 5. Palmes, the thickenesse of the second Columnne within, is 4. Palmes, and the thickenesse of the third Columnne is 3. Palmes and thise quarters. The widenesse of the Tribune within, is 188. Palmes, the Diameter of the small Laathozne within the middle, is 36. Palmes; the rest you may guess by the small Palme.

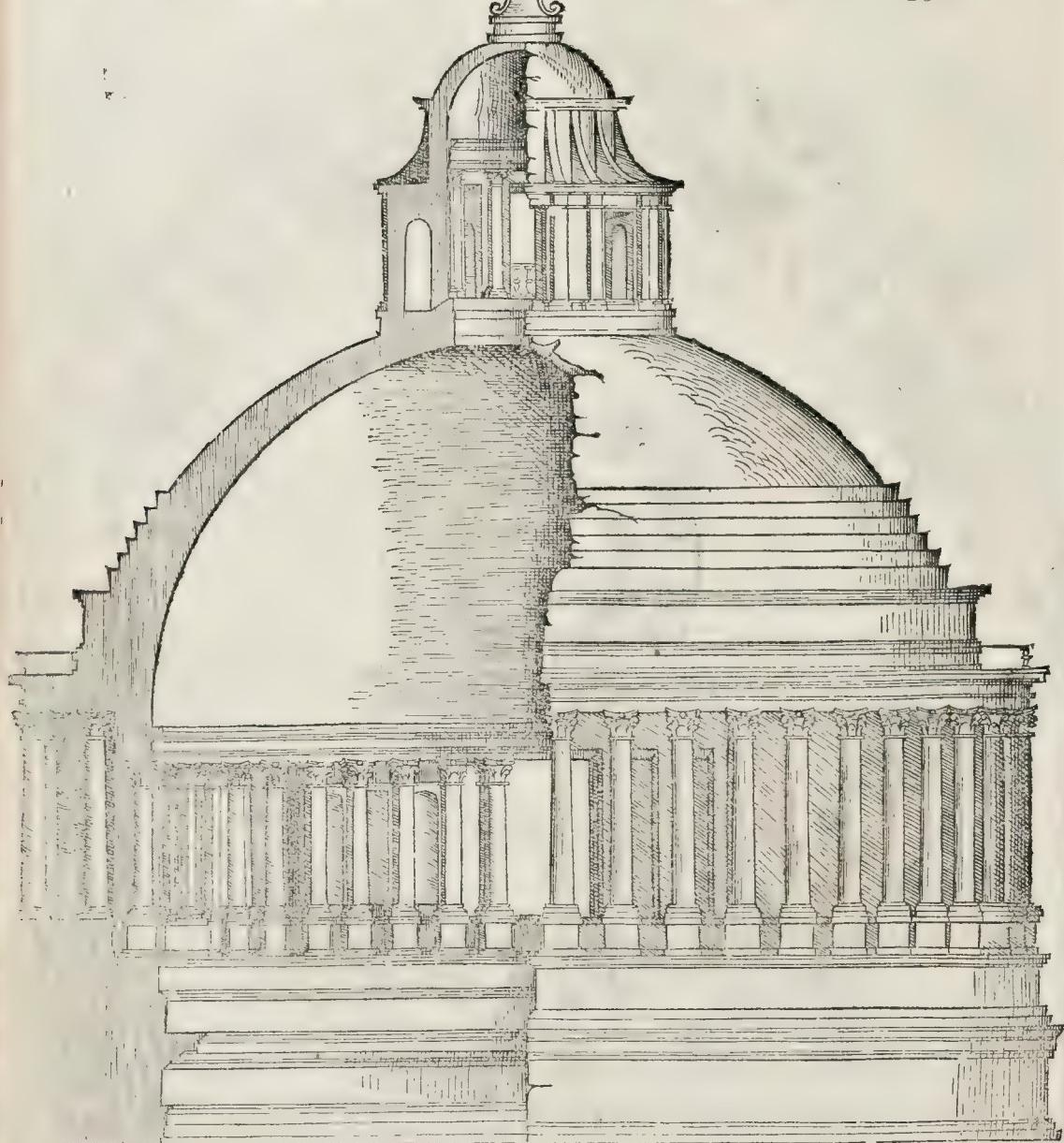


Of Antiquitie

This is the Orthographie both within and without, drawn out of the Archigraphie above set downe, whereby you may concerne the great masse & waight whiche shold haue good vpon the fower Arches; which waight may give any wisse workeman matter to consider, that it had bene fitter to set it vpon the ground, and not in the ayre vpon such a height; and therfore I counsell all workemen rather to be doubtfull then to rashly: for if he be doubtful, he will make his worke surer, and not despise another mans counsell;



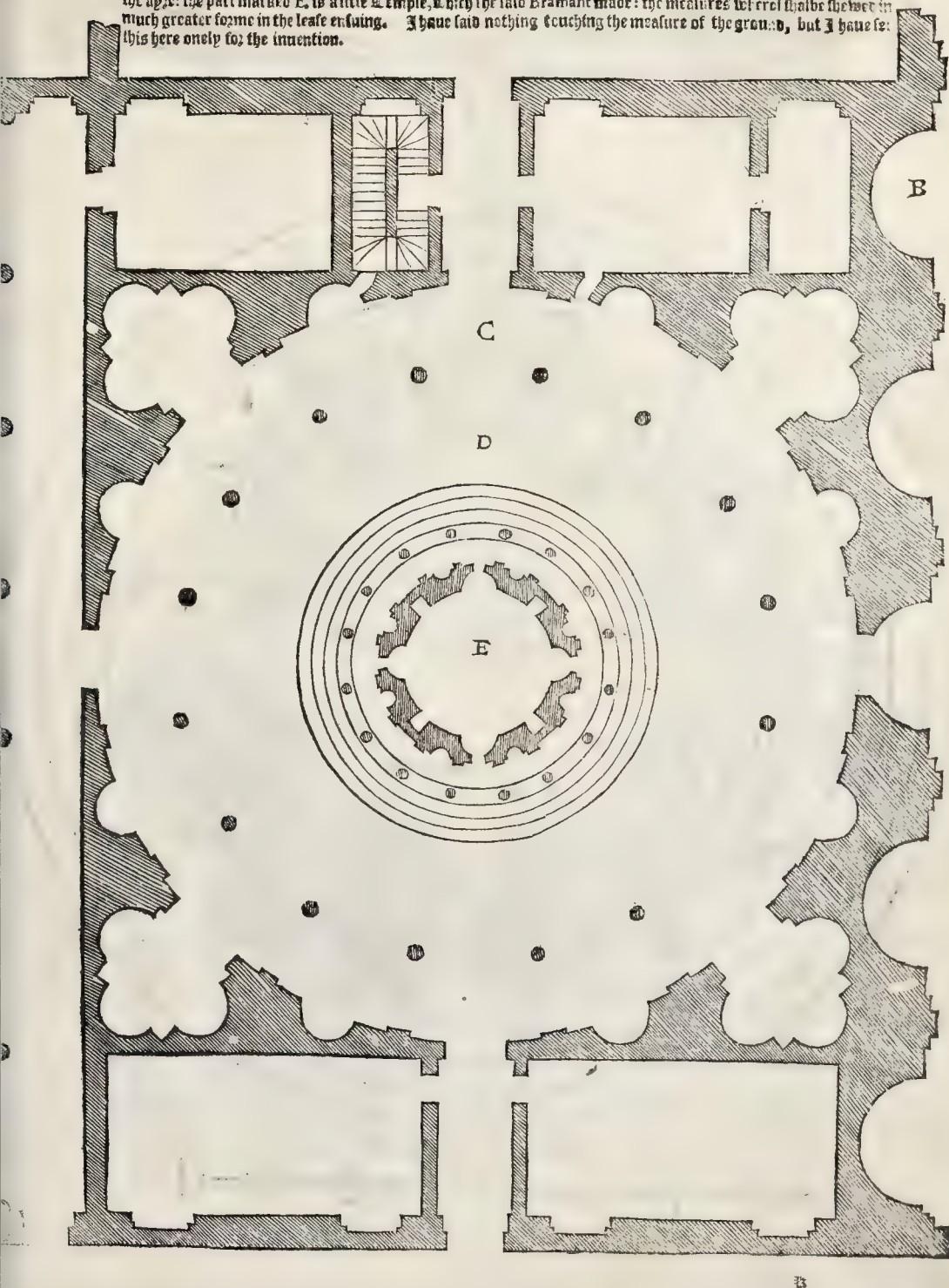
Which doing, he shall seldome fail: but if he be rash and stout, he will not take any other mans advise, but will trust only to his owne invention, whereby oftentimes his worke doeth him more shame then honestie: therfore I conclude, that stoutnes procedeth from presumption, and presumption from small understanding; and I say, that doubtfulnesse or bashfulesse is a vertue, making a man to thinke he knoweth little, although his understandyng be great: the measure of this worke is to be found by the aforesaid small Palme.



The third Booke.

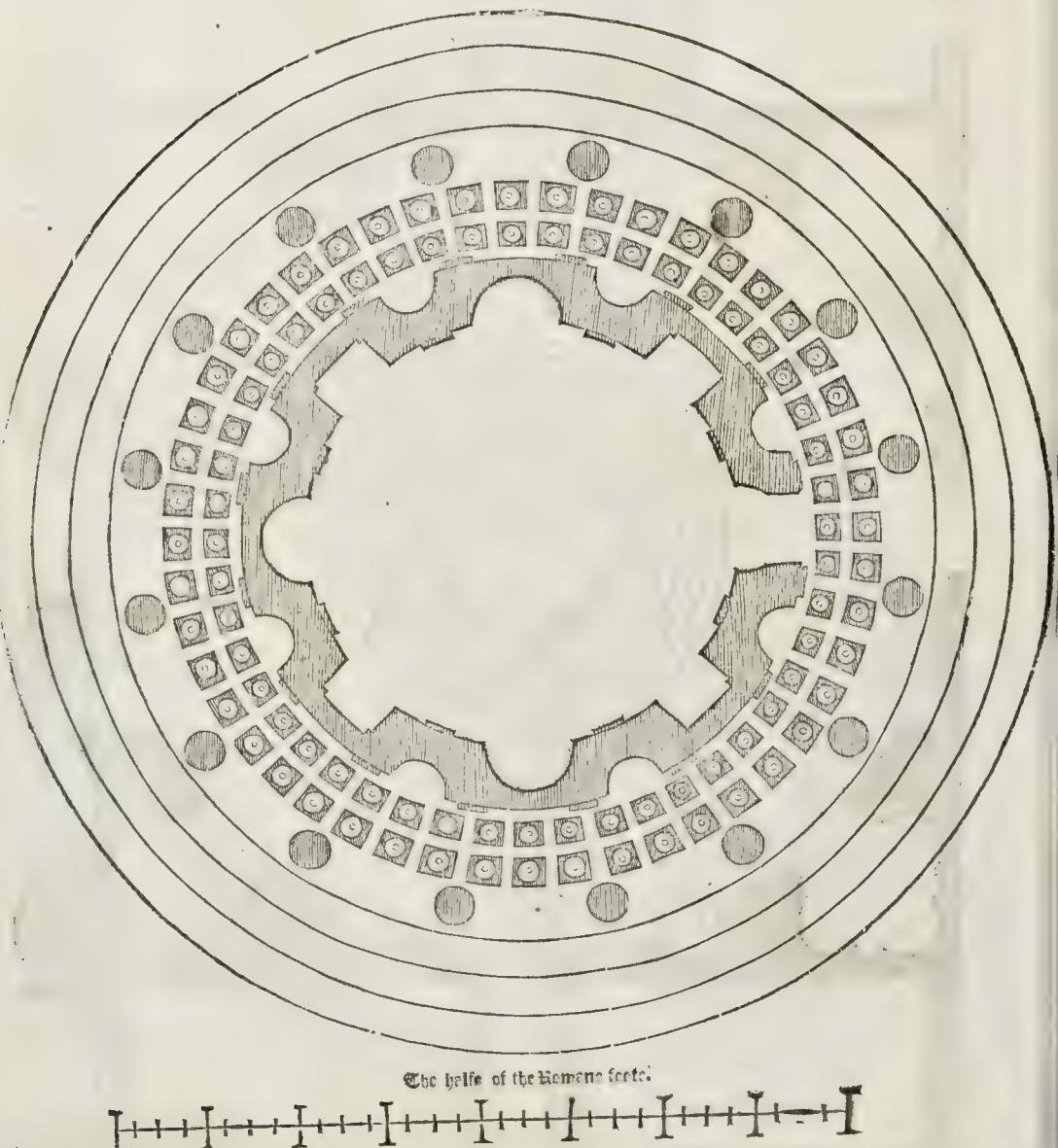
The fourth Chapter, Fol. 18.

This ground set vnder this, is also an invention of Bramante, though it was never made, which agrēd with the old two; he: that part which is marked with B. is S. Peters Church in Montorio without Rome, and that part marked with A. is an old Cloyster, but that part in the middle, Bramante ordyned, thereby to helpe himselfe with the old wozke: the place marked C. signifieth a Gallerp with four Chappels in the corneres. The place B. standeth under the aye: the part marked E. is a little Temple, which the said Bramante made: the measures whereof shalbe shewen in much greater forme in the lease ensuing. I haue said nothing touching the measure of the ground, but I haue set this here only so; the invention.



OF Antiquitie

[On the left side I promised to shew Francys Temple in greater forme, whiche is not very great, but was erily made
in remembraunce of S. Peter the Apollie, for it is true that he was crucified in that place: the sayd Temple is to bee
measured by the R. men. i. fute foote, i. syue fingers; and every fnger is foure minutes. Whereof also you
shall haue the measure by the R. men. id. i.e. augmenting the said syue fingers. The Diameter of this Temple
is of foure and twentysix, and two and threty minutes. The widenesse of the walke round about the Temple is se-
uen foote. the th chanchell of the Courte is one foote and 25. minutes. The hidenesse of the Doore is thre foote
and a halfe: The Quarters v. viii. feete apel. will in. Which greate round about the Temple, shew the Laturay of the
Temple above the Columnes: the th chanchell of the wall is foure foote; the rest of the other measures you may conceave by
the fule.

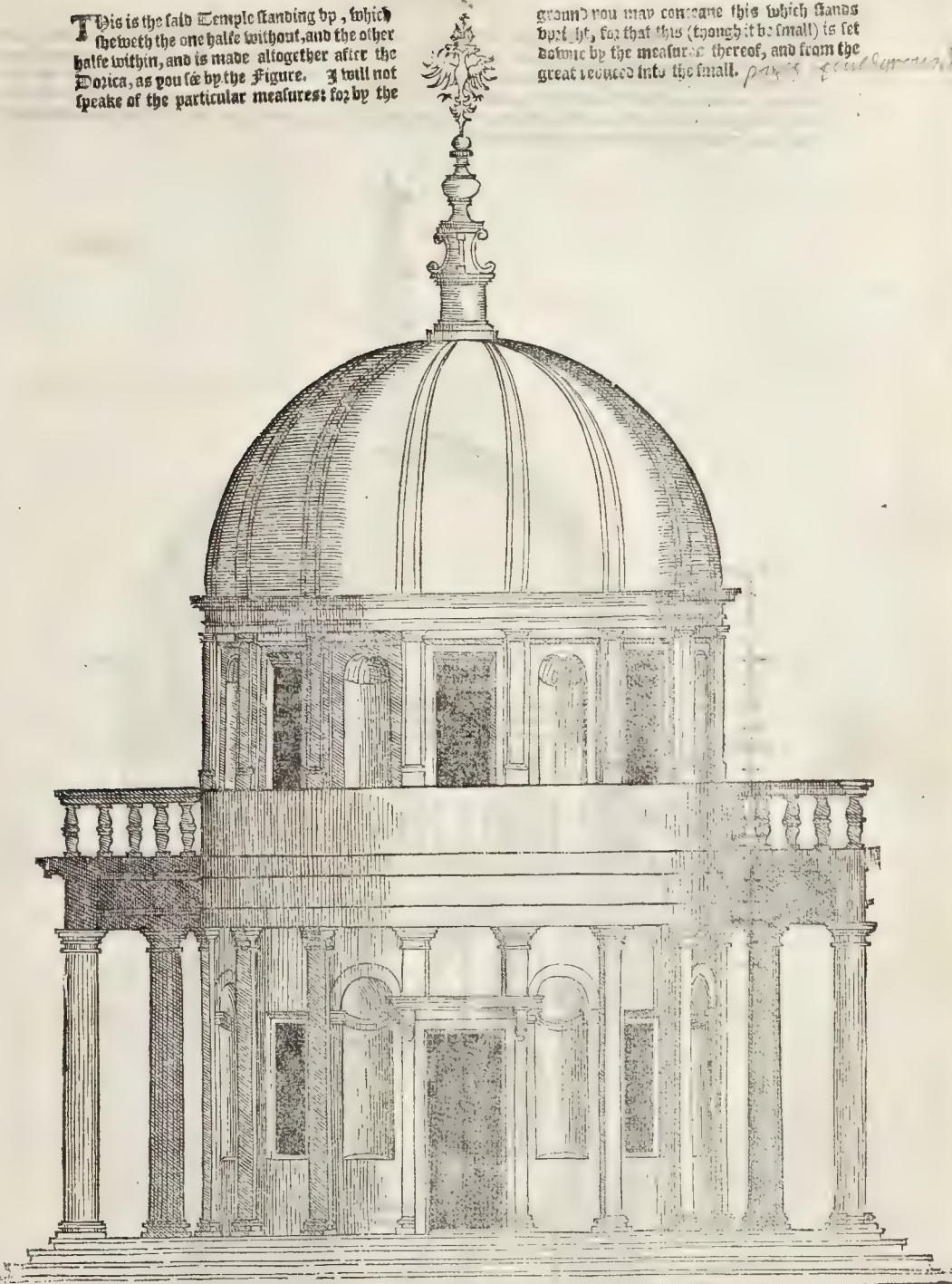


The third Booke.

This is the said Temple standing vp, which sheweth the one halfe without, and the other halfe within, and is made altogether after the Dorica, as you see by the Figure. I will not speake of the particular measures; for by the

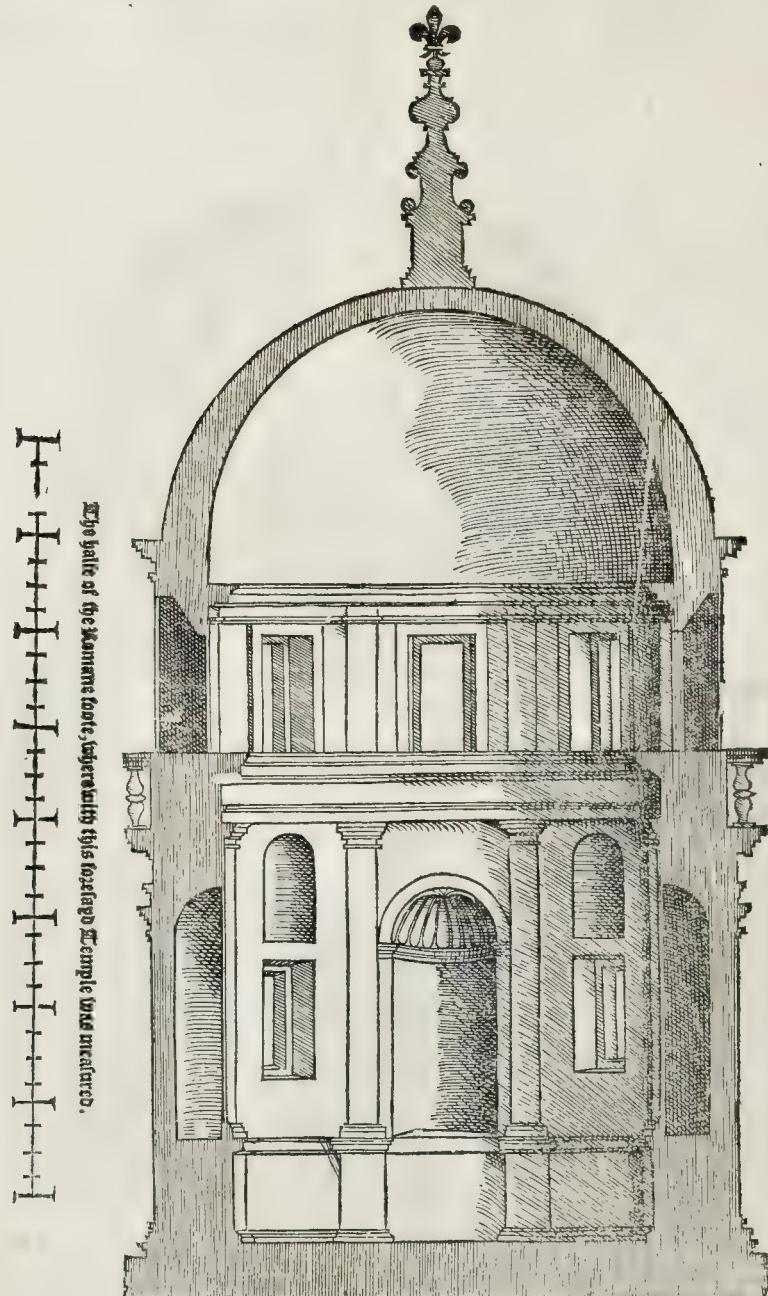
The fourth Chapter. Fol. 19.

ground you may conceare this which stands vp: & ht, for that this (though it be small) is set rotund by the measure thereof, and from the great ioyced into the small. prynce of all emperors.



Of Antiquitie

Now I haue shewed the outside of S. Peters Temple, in this I will shew the innermost part, which is made with such proportion, that the workmen by the widenesse of the ground, may finde all the measures: and although that this Temple sheweth to high for the breadth, so that it is thought and shewed to be as high as it is broad: notwithstanding, by the operemesse of the windowes, and the Richenss or Chappels that are in it, the height thereof is not amisse, and especially by meanes of the double Coynces, which goe round about, and couer much of the height together with the Projecture, the Temple sheweth much more as it is,

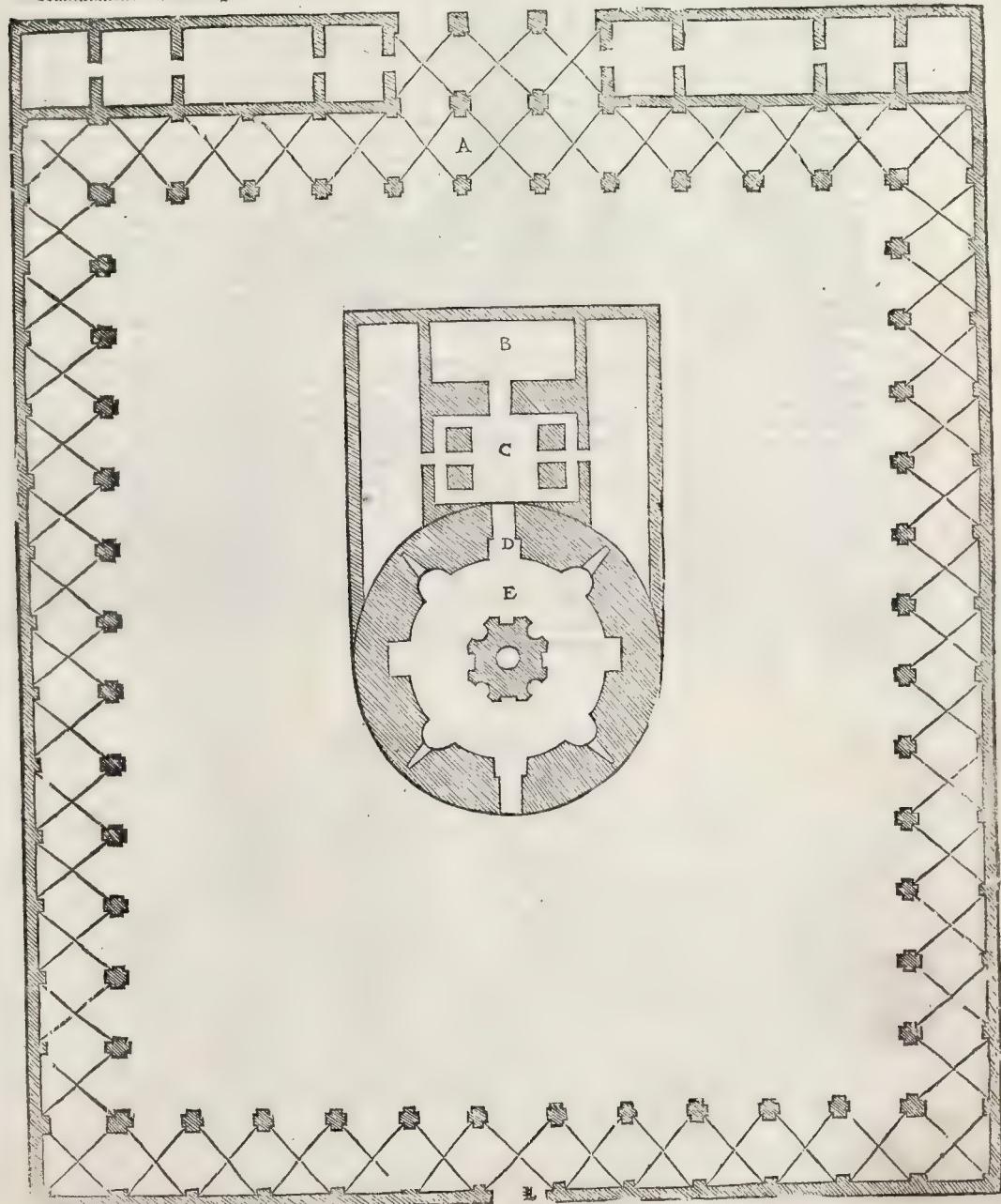


The halfe of the Romanes Conte, wherewith this foresaid Temple was measured.

The third Booke.

The fourth Chapter. Fol. 20.

This Building is without Rome, at S. Sebastians, and is all fallen downe to the ground, especially the walke about, but the Building in the middle (because it is very sure work) is yet whole, and is made of Bricke: you see no ornaments in it at all, & it is darke, because it hath no light but of the Dore; and aboue the fourre hollow places in the wall, some small Windowes. The ground of this worke is measured with the old Romish Palme, and the lengthes with the breadthes are measured with roodes, and every roode is ten Palmes. First, the walke or Gallerie marked A is 49. roodes and 3. Palmes, the other two longer, are 56. roodes and 3. Palmes: the breadth o. the walkes is 32. Palmes: the thickenesse of the corner Pillars, with all their members, is 12. Palmes: by the which measures you may conceave the rest. Touching the Building in the middle, the place B. is vancouered, and is in length 7. roodes and 6. Palmes: the breadth is 3. roodes and 4. Palmes: the part marked C. is coarced, and containeth 4. roodes in fourre square. The fourre Pilasters are ten Palmes thicke: the thickenesse of the wall round about the round Building, is 24. Palmes: the place marked E. is roost: and that part in the middle is a masse, which beareth the roose; in the middle wherof, there is an opening: and this masse is beautified with many hollow seates in it, which stand right, and accompany those that stand in the wall: touching the heighles (because of the brokenesse) I measured it not; and especially, because there was no beautifulnesse of Building.

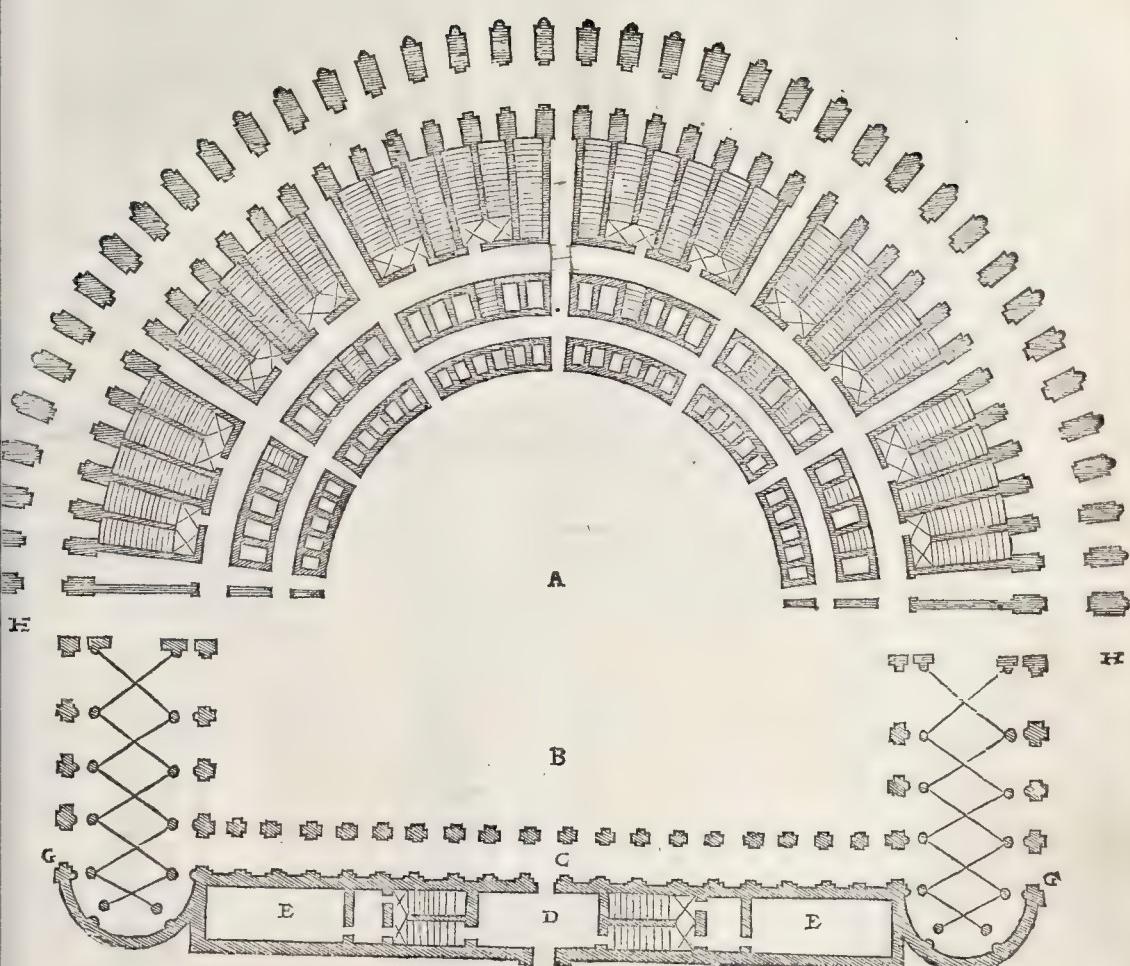


Of Antiquitie

This Theater Augustus made in the name of Marcellus his Nephew, and therefore it was called Marcellus Theater, it standeth in the Rone, you may at this day see part of it standing upright, that is part of the Galleries without: it is one of two stories, that is, Douica and Jonica, a物种, in truly, that is much commended, although the Doricall Columnnes have no Dales, nor any Cnute or Projecture vnder them, but stand plainely without any thing vnder, vpon the flat ground of the Galleries. Touching the ground of this Theater, men could not well conceave it: but not long since, the great patrician of Rome, going to make a house, the situation whereof was to be set upon part of the Theater (this house was made by one Balchazar of Sienna, an excellent workman) and as he caused the foundation to be digged, there were found many reliques of divers Cnices of this Theater, and a great part of the same Theater was discovered, whereby Balchazar conjectured the whole forme thereof, and measured it with great circumfpection, placing it in the forme following: my selfe being at that time in Rome, saw many of the Comites, and sound frendes loy to meaine them, and in truth, therer I found as excellent formes as ever I saw in any old Ruines, and most in the Capitals of Douica, and also in the imposts of the Arches, which, methinks, agree well with the doctrine of Vitruvius. Likewise the Fratre, Triglyphen, and Octophopen, agree well enough: but the Dorica Cnice, although it be very full of members, and well wrought, yet I found it to differ much from Vitruvius instructions: for being Iheronious enough of members, was of such a height, that the two third parts of such height shold haue bene enough to the Archstrate and the Fratre. But I am of opinion therefore, (by the licence of these, or other Antiquities) that a workeman in these daies shold not erre, (which erroz I meane, is to doe contrary to Vitruvius precepts, nor to bee empemtory that he will make a Cnico, or other thing inst of the same proportion as he hath done and measured, and then let it in worke, because it is not sufficient for him to say, I may doe it: for ancient workemen haue done it, without consideration whether it be proportioned according to the rest of the building. Besydes, although an old workeman was so bold, yet we must therefore not bee so, (but as reason teacheth vs) wee shoulde obserue Vitruvius rules as our guide, and most certayne and infallible directions: for that from that time of great Antiquity, till now, there is no man found to haue written better, nor more learnedly of Architecture then he: and as in every Arte there is one meze learned then another, to whom such authority is given, that his wordes are fully, & without doubt beleu'd. Who then will denye if he be not ignorant, that Vitruvius, for Architecture, is worthy of the highest degree: and that his writings (where no other notable reason or cause to the conterary be) ought for the vnderstanding thereof to be inviolately obserued, and to bee better credited, then any works of the Romanes? Which Romanes, although they learned the upright manner of Building of the Grecians, notwithstanding, vtried their hand here in Rome, vnder the Grecians, it may be that some of them thereby became licentuous: but certainly, if a man might see the wonderfull works whiche the Grecians then did make, (which are now alwaies all pouertie and ryme done in time of warre, hee would assuredly judge the Grecians worke to surpass that of the Romanes farre.

Therefore all those workemen that shall condemne Vitruvius writing, & specially in such casas as are clearely understand, as in the order of Douica, whereof I speake, should erre much in the Art of Architecture, to gaue lay such an Anthor, as for so many yeres hath bene, and yet is approued by wise men, learned. Holde having made this direction, which was necessary for the good of those that would not haue considered so much, turning againe to the purpose, I say, that this ground was measured by the old Romane foote, and fift, the place is the middle, marked A. whiche is called Orchestra, is in the Diameter 194. foote, and is halfe a Circle from one corner to the other: of the stages or seats, marked H. it is 417. foote: the place marked B. called Proscenium, is very spacious; and where C. standeth, is the Gallery, whiche they call Porches of the Scene, in the middle wherof stood the Pulpit: that part marked with D. was a portall, with stayres on both sides, which went vp to the places marked E. called Hospitalia: the two Galleries on the sides marked F. they used to walke in: Of which things men can see no more above the ground, for that they are covered with other houses. Touching the severall measures, as well of the Scene as of the Theatre, and of the degrees, I will say no more: for that in the Amphitheatre called Colse, I will declare it more at large, whereby a man may conceave how this stood: but that part without, which went about the Theatre, I will shew in the seconde Figure, which was measured (before this) with a common Ell, which is divided into twelue parts, which parts are called onces: and every onunce hath five minutes; of which Ell, this is a third part.

The third part of the Ell.



Of Antiquitie

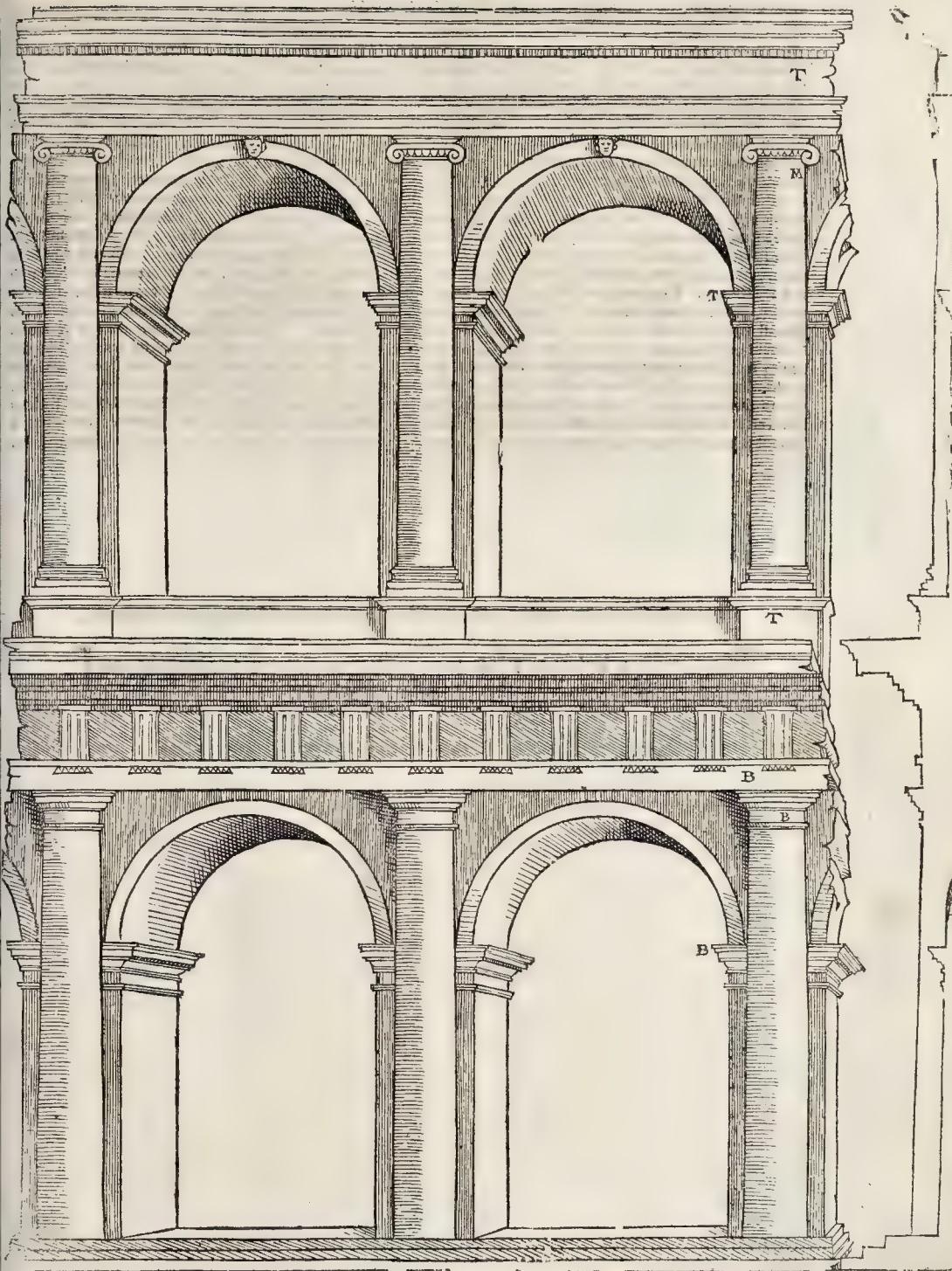
This Figure following representeth that part without, of the soverayn Theate, and is measured with the Ell soverayn: and first, the thickenesse of the Columnes beneath in the nether part of the first order, is an Ell and 43 minutes in Diameter: and the thicknesse of the Diameter above vnder the Capitall, is an Ell and 16 minutes: the heigh of the Capitall, is halfe the thickenesse of the Columnes beneath, the whiche Capitall is more perfecter marked in the fourth Booke, in the order of Dorica, in Folio E. 3. And the same Capitall is marked with B. Likewise also the impost, whereon the Arch resteth, is as high also as the Capitall, and standeth also in the same leafe E. 3. The Pilasters, vnde the Columnes, are 19. minutes: the widenesse of one Arch, is 7. Ells and 9. minutes: and the height is eleven Ells and fiftene minutes: the height of the Architrave, is 49. minutes: the height of the Frise is one Ell and eight minutes. The height of the whole Cornice, is an Ell, and fourtie minutes: the widenesse of the second Arch of the second order, is as wide as that below; but the height is ten Ells and fourtie and eight minutes: the height of the Pedestall vnder the Columnes of this second order, is an Ell and fourtie and eight minutes: the thickenesse of the Columnes, is an Ell and twenty & fourte minutes: the height of the said Columnes without Bases or Capitals, is 11. Ells, 17. minutes: the height of the Bases is 44. minutes: the height of the Capitall, that is within the Volutes, from the list of the Columnes, to aboue the Capital, is 26. minutes: but the Volute hanges over the Abra-gall or Bezzell 20. minutes and a halfe, which in all, from beneath the Volutes, to aboue the Abacus, is 47. minutes and a halfe: the breadth of the Abacus of the sayd Capitall is one Ell and a halfe: but the breadth of the Volutes is two ellis: the height of the Architrave is 59. minutes: the height of the Frise is 58. minutes: the height of the Cornice is an Ell, & 48. minutes: which Cornice, in truthe, is halfe so much more as it shold be (if we wll credit Vitruvius precepis.) But I pray you, gentle Reader, excuse me not presumptuous, neither yet account me for a coorrector of the works of Antiquite, from whence men learne so much: for my meaning is onely, willingly to let you understand and know that whiche is well made from that whiche is ill made: and that I wll not doe after my owne conceite, as if you were taught by me, but by the authority of Vitruvius: and also of god Antiquities, which are those which best agree with the doctrine of that Autho: The Base of this second order, and the Pedestall vnder it, the Impost of the Arches, and wthall, the Architrave, Frise and Cornice, you shall altogether find in the fourth Booke of the order of Ionica in Folio K. the second, and are all marked with T. Likewise you shall find the Capitall in the same fourth booke, behinde in the leafe I. the 4. marked with M.

The third part of the soverayn Ell, of 60. minutes.



The third Booke.

The fourth Chapter, Fol. 21.



Of Antiquitie

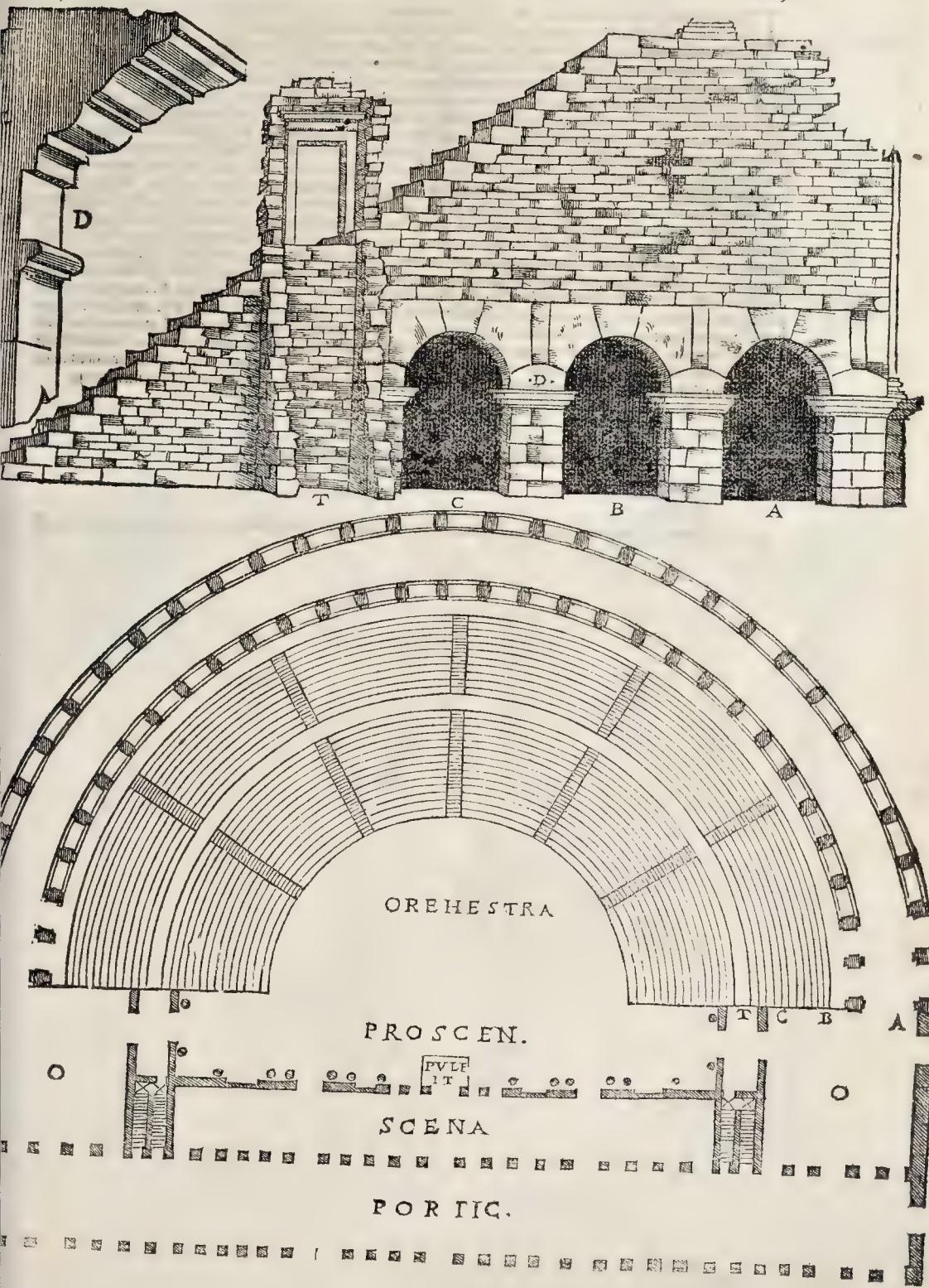
In Dalmatia there is an ancient towne called Pola, lying by the sea side, wherin you may see a great part of a Theatre; in the making whereof, the expert workeman did helpe himself with the hill whereon it standeth, bling the hill for part of the degrees of steps to goe vp, and in the playne belowe, he made the Orchestra, Scene, and other buildings belonging to such a piece of worke. And in truthe, the ruines and the pieces which are yet at this day found, doe shew that it was a most beautifull and sumptuous piece of worke of stone and workmanship; besides this, there you may see a great number of Columnes, some standing alone, others with Pilasters, and some Corners with four square Pillars, and some halfe round, all bound together, and well wrought, after the Corinthia; for the whole work, both without and within, was made after the Corinthia manner. This Building was measured with a moderate or small foote: which foote is divided into twelve parts, named ounces, wherof the one halfe hereafter followeth. The Figure hereafter following, sheweth the Ichnographie, and also the Profil of the Theatre, wherof this is the measure: the widenesse of the Orchestra which is halfe a Circle, is in Diameter about 130. foote; the degrees of steps round about, with the two waies of strakes, are of 70. foot: the way marked T. comes even with the plane of the Pulpit of the Scene to the fourteenth step. The widenesse of the Porticus round about the Theatre, is 15. foote, and the sides of the Pillars inward, is of 17. foot & a halfe, but the space betwixt the Pillars round about the Gallery, together with the Columnes, holdeth about sixe foot in brede, and from the one Pilaster to the other, it is about 10. foot wide: and this is touching the ground of this Theater. The two greatest Quadzans marked O. are the Holpitalia from whence places men went into the entry or passing through, marked T. which comes vp to the streeet, halfe way to the steps, as you may perceive by the Profil marked T. and under the going through, is part of the going in. The Holpitalia is nine and fiftie foote, the breadth of the Scene, is 21. foot, the breadth of the Porticus or Gallery before, is 27. foote, and the length is like the house; the Building which standeth about the ground of the Theatre, signifieth the Proscenium, which is cut through the sides of the Theatre. The Arch marked with A. signifieth the going in, the second Arch C. and B. are under the steps, the Cornice besides marked with D. is the impost of the Arches: there nedeth no going vp to this Theatre, for the hill abovesayd easeth the workeman therein, and men might also goe vp to the Theatre from the Scene, because it was formed to the sayd Theatre: but the Theatre of Marcellus is seperated from the Scene, and therfore the goings vp were necessary.

This is the halfe foote of measure, whereby this Theatre was measured with all the ornaments.



The third Booke.

The fourth Chapter. Fol. 236



Of Antiquitie

This Theater (as I have sayd) was very rich of ornaments, all of stone, and made of Corinthia worke, very well and richly wrought, and by as much as is seen by the ruines which lie scattering about the Scene, was very beautifull of Columnnes upon Columnnes, both double and single, and also in the innermost and outermost parts, with divers ornaments of Doores and Windowes. The innermost part of the Building is much ruined: and touching the measures, I can say little; but of the outermost parts, I will say somewhat of their measures. The first, a rustickall or cleannish order, wherein there is no Columnnes, is elevated from the earth, together with the whols Cornice, marked E, about 16. foote: the height of the first Pedestall, is five foote, the height of the Columnnes with the Bases and Capitals, is 22. foot: the thicknesse of the Pillars, with the Columnnes, is 5. foote: the thicknesse of the Columnnes alone, is two foote and a halfe: the widenesse of the Arches, is about ten foote: and their height twenty foote: the height of the Architrave, Frise and Cornice, is about five foote; the second Pedestall marked X, is of four foote and a halfe: the height of thys Columnnes are about fifteen foot, the Architrave, Frise and Cornice, is foure foote high. I set not downe the measures of the particular members, but in the Figure you may conceave them; for they are iust of the same proportion: I set not downe the measure of the Scene, nor of the other parts within: only I haue here set forth a part of the Portion of the Scene, which is marked P. And also the Cornice, Frise and Architrave marked F, was in the highest thereof, the Capitals marked S, stode within, with some halfe round Columnnes, rayled out of some Pilasters, things that were very well wrought: all which things (as I sayd before) are so sumptuous, both for stone and worke manerhip, as they may well be compared with thys of Rome: the Cornice, Frise and Architrave, marked A, was in the highest part of the Theatre: the Cornice marked B, is the impost of the second Arch: the Architrave, Frise and Cornice, marked C, is the Cornice above the first Arch, the Cornice marked D, is the impost of the Arch: the Cornice marked E, goeth above the rustick b-slement round about the Building: this line hereunder is halfe a foote, of the whole foote therewith this Building was measured. And wonder not, gentle Reader, that I set not downe all the measures more precisely; for these things of Pola, were measured by one that had moze understanding in caking, then in measuring.

The halfe foote, whereby this is measured.

The third Booke.

The fourth Chapter, Fol. 24.



Of Antiquitie

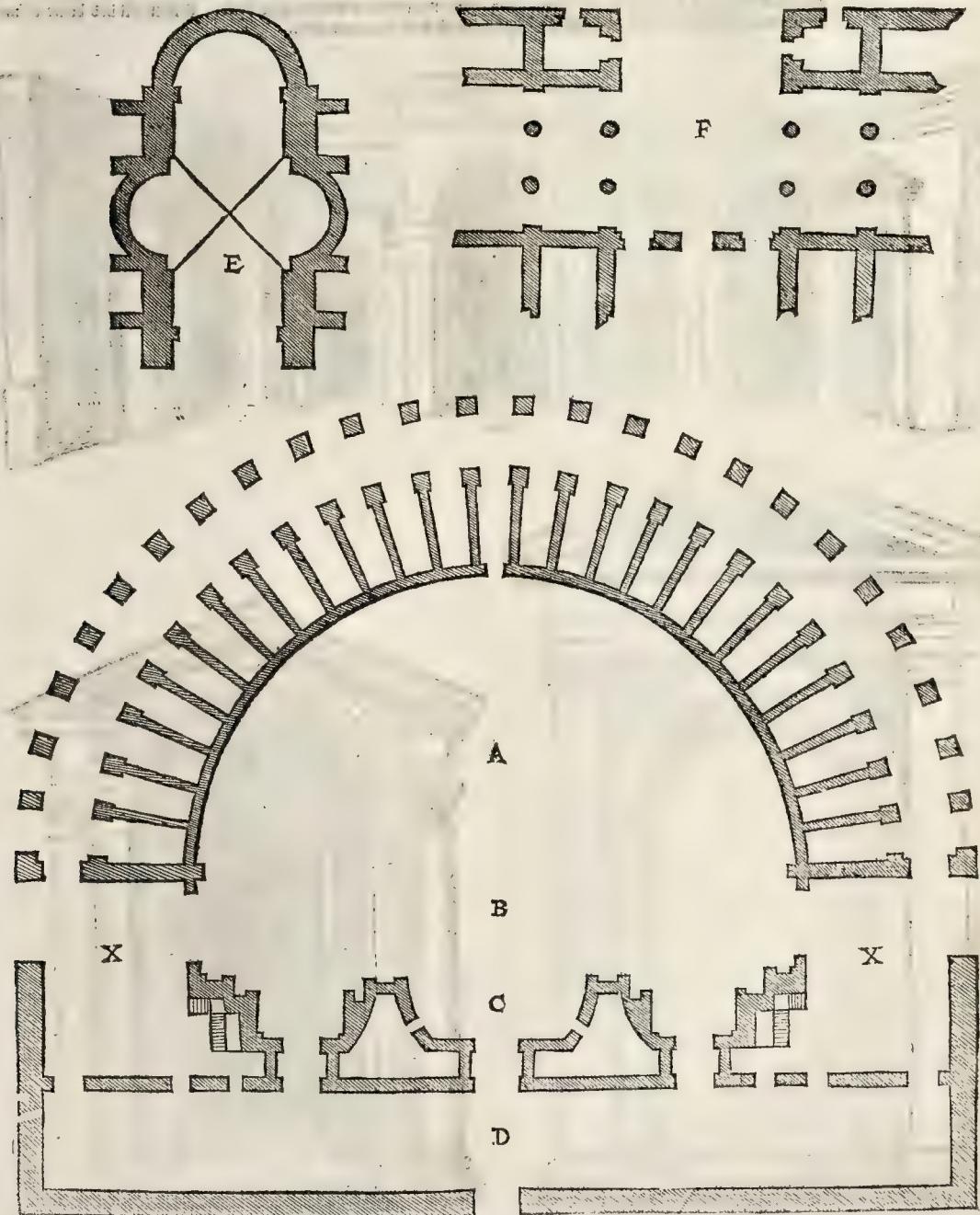
AT Ferentia, an old towne lying by Veterben, there is yet to bee seene the forme of a Theatre, much decayed, being of no great workmanship, and lesse ornaments, for any thing a man may perceave by the same; for there are no pieces to be seene whereby a man may conceit any matter of importance. But you may yet see in the Porticus going from the Theatre, there were four square Pillars, also the Staires therof were very simple and plaine; and because it is so much decayed, you can hardly discerne how they stood. The Scene of this Theatre is much different from others, as you may see in the ground thereof: neither is there so much standing above ground, that a man may perceave how the Scene and the Pulpit thereof stood. This ground was measured by the ancient stote, and first, speaking of the Orchestra A, which is halfe a Circle, the Diameter thereof is 141. fot and a halfe long. The body of the Theatre, that is, from the Orchestra to the outermost of the corner Pillars of the Porticus, is 35. fot: the Pillars of the corner on eyther side, is 5. fotte broad: the entry of the Porticus on the side of the Scene, is 8. fotte: the bault under the Staires, is 22. fotte: the thickenesse of the Wall about the Orchestra, is 3. fotte and a halfe: the Hospital, marked X, is in length 40. foot and a halfe; and in breadth 30. foote: the widenesse of the Porticus about the Theatre, is 11. foote: the Pillars are thicke and broad, 3. foote and 3. quarters: the widenesse of the Arch, is 9. foote: the iust breadth of the Orchestra marked B, is 20. foote: the place of the Pulpit C, is in length 40. foot and a halfe; but the breadth is 12. foot: the going through, is 9. foot. The place marked D, shoule be the Porticus behind the Scene: yet there is no shew of any Columnes; but it sheweth that there was a wall standing by the water side. The breadth of this place, is 19. foot and a halfe. Without this Theatre there standeth the foundation of two Buildings, but they are so much decayed, that you can finde no end of them: neuerthelesse, the Building marked E, so as much as you see of it, sheweth that it was ioyned to other things. The widenesse wherein the F. standith, is 31. fotte. The 2. small places or stancies holding vp the one side, are eghat foot and a halfe; and on the other side, ten foot and a halfe. The Arches where the four Columnes stand (which I take to be made in that manner) are in length 27. foot and a halfe, and in breadth ten foot and a halfe. The breadth of the Building marked E, is twenty foot: the hollow places in the sides, are 17. foote: the length of all together, is 60. foote, and is distant from the Theatre one hundred and one and fiftie foot: and from the other Building, seuentie foote and a halfe.

The halfe of the olde foote. — in (c) B. tius monument



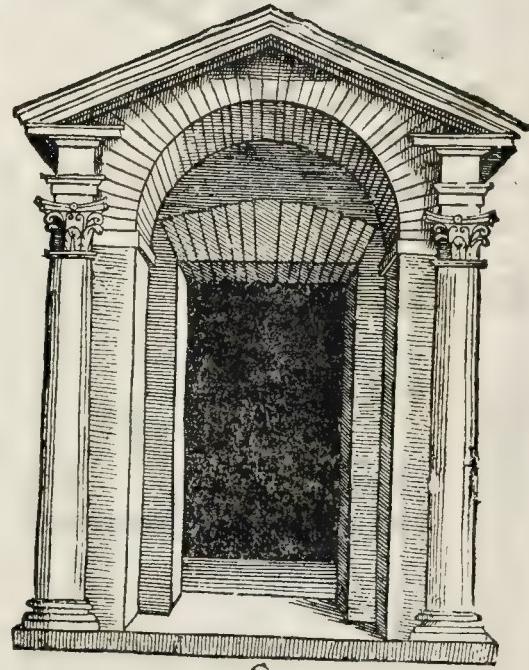
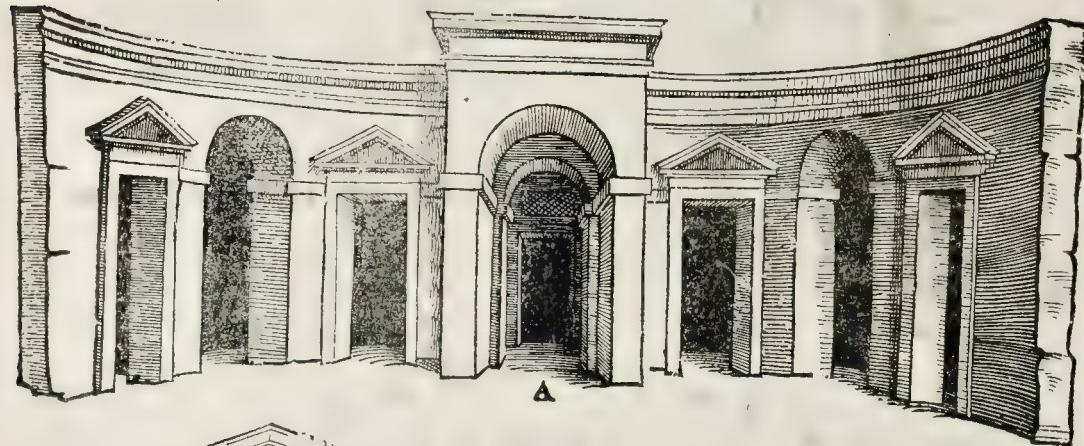
The third Booke.

The fourth Chapter. Fol. 25.



Of Antiquitie

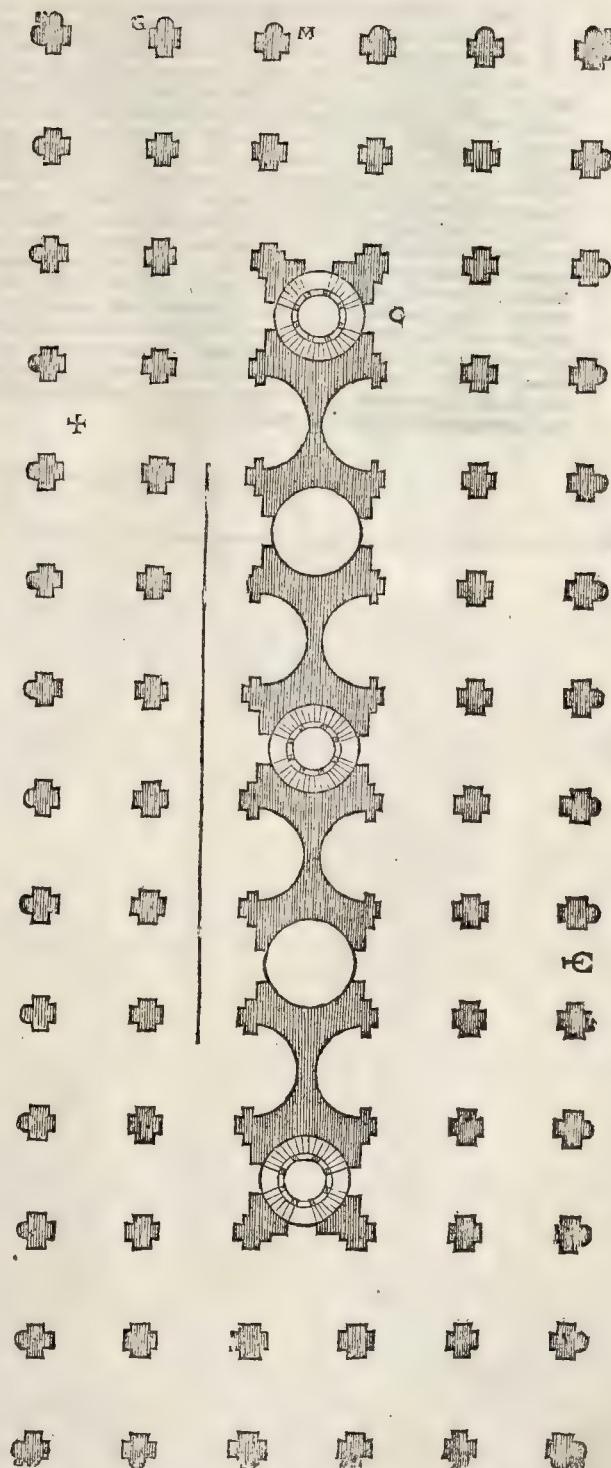
The Figure under this, marked A. I thinke to beme bene the Scene of a Theastr, it standeth betwene Fonda and Terracina; but there is so litle to be seene of the Theatre, that I measured it not: neithers did I measure this part of the Scene, which is more decayed then it sheweth here: but as I sat on boyle back, I made a slight draught therof. The Dore marked B. standeth at Spoleto, and is very old, made after the Doria maner, which likewise I did not measure, but made onely the invention and forme thereof. The Gate marked C. is betweene Foligio and Rome, out in the straet: and although it semeth a licentious and unseemly thing, that the Arch should breake the passage of the Architrave, Frise and Cornice; yet nevertheless, the invention dislikid mes not. I measured onely the bredth and the length, the whiche I found to bee eightene foote, and one and twenty foote and a halfe. I thinke it had bene a small Temple, or a Sepulchre, but what it will, it sheweth well to a mans sight.



The third Booke.

It is sayd, that this building was calld, Porticus, of Pompeo: others say, that it was the house of Mario: but it is called by the Common people, Carabario: whiche building, as farre as I can learne, was onely made for men to easethemselues in: for there is no dwelling in it at all: and although this building at this day is almost decayed, yet it was very great, and contained many places, as you see by many houses of this building which are found in the earth. Where the Line standeth, is now the way to goe from Campo Floro, to the Jewes place: and where the Crose is now, the houses of Sancta Crose stand: where G. stands, is the Jewes place: where the M. standeth, bee the Parcellarii: where the C. standeth, is the Churchyard of S. Salvatoric: and where the E. is cut through, is the Forc: front of the houles of Celis: so that thereby you may see the great compas thereof. The thys round things were stampes to gae vp to the two empie Rounches. And for that there is no shew of stynes to be seene in those two, it is to be conceaued, that they were open places to make water in, (for such things are necessary.) The ground of this worke is measured by the same Ell that the Theater of Marcellus was measured withall: whiche measure you shall finde here, after the Obulcen, and halfe an Ell halbe thirty minutes.) And first, the thicknesse of the Pilasters is three Elles and a halfe: the thicknesse of the Columnes is two Elles: the Intercolumnies, are on all sides, nine Elles and a halfe: the Pilasters of the fourre Cozners, are so much more then the outermost Cozners stand over them: which Cozners were made with god iudgement, for they uphold the Center by strength, and with beauty of worke. Herby workemen may learne how to make Cozners with Columnes, and with Pilasters bounde together, that the Cozner may also be fourre square, as the Columne is, which giueth the Cozner moze fastnesse, then if the same Cozner were drawne along the Pilaster: and for the Cozners which are drawne in, if you see them ouer the tide in Diagonall maner, where the two round Columnes come the Cozner, then they will seeme iuperit Cozners, and specially, because they are seene on all sides.

The fourth Chapter. Fol. 26.



Of Antiquitie

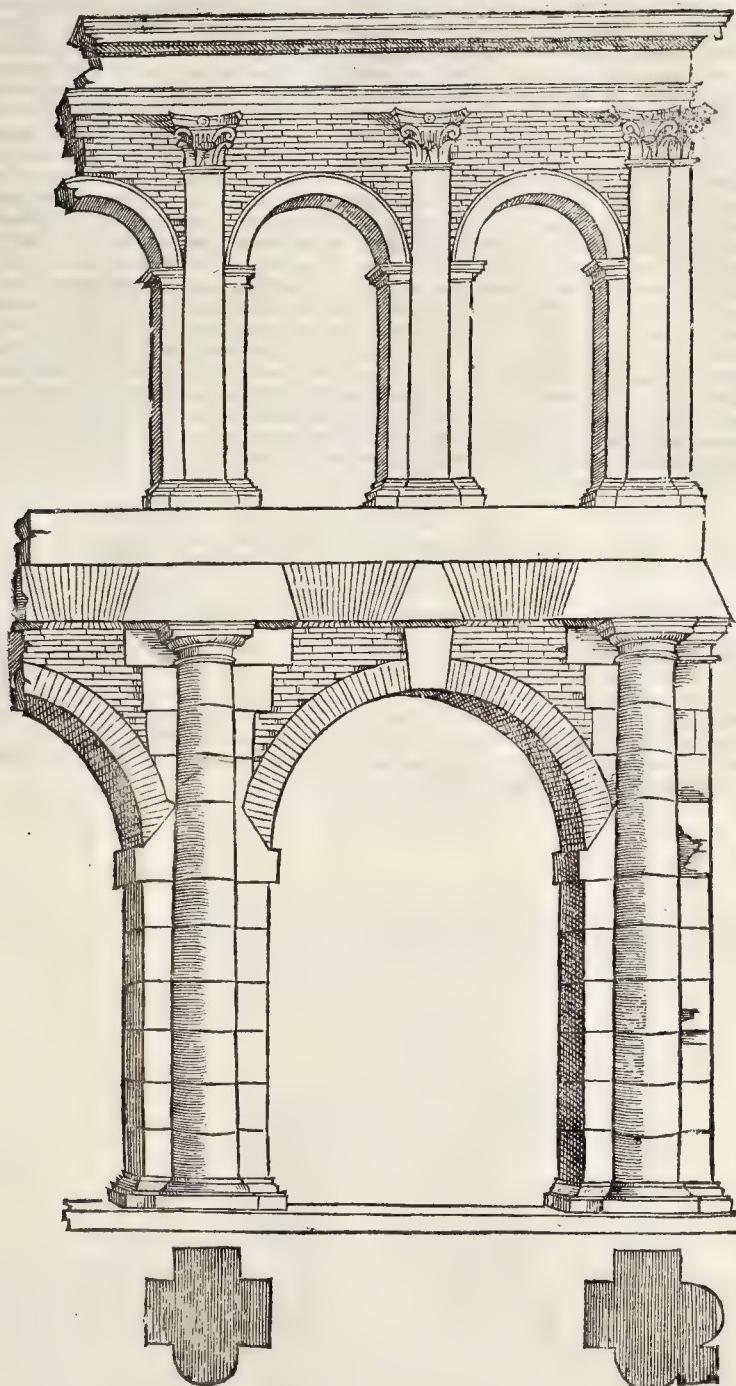
Touching the Zchnographie, I have sayd inough; now I must speake something of the forme above the ground, although there is not much thereof to be seene: neuerthelesse, there is yet so much standing upright (although it be hidden) that thereby the backe part therof without, is to be concaneed, which, in teneth, is an ingenious invention, for a salt wozke, and especially in the first oder, which you call Dorica, althoough it hath neyther Architrave, Triglyphe, nor Cornice: But yet there is the forme, and that very subtilly made, with great strength and large Building (as wel of hard stone as of Bricks) as you may see in the Figure following. The thickenesse and brede of the Building (as the height of the Columnes with Bases and Capitals, leuantane Ellis: and the height of the Arches, fiftene Ellis. The height of the Cunco that is, the Shutting stone aboue the Arch, is 2. Ellis: the height of the binding, which is the Head of an Architrave, is 2. Ellis, and so much is the Facie above it. The second oder seemeth unsupportable, for that there is a waight of Pilasters standing above an open hole: a thing which in truthe is false & erroneous to speake in reaon. Neuerthelesse, for that the first Oder is so fast and strong, by meanes of the Shutting stone aboue in the Arch; as also with the croft ston upon it, with the salt Face vpon that, and by reason of the good shoulders of the Arch, which altogether shew to be such a strenght (as in effect it is) that the Pilasters that rest vpon it, serue not to oppresse the wozke, as they would, if it were a simple Arch, with an Architrave, Frieze and Cornice: for which cause I blame not this inuention therein. The widenesse of this Arch is 4. Ellis: the height is nine Ellis: the brede of the Pilasters, is two Ells and an halfe: the thickenesse of the Columnes, is an Ell and a sixt part in Diameter: the height of the Columnes is eleven Ells and an eyght part with Bases and Capitals, and are made after the Corinthia manner. The height of the Architrave, Frieze and Cornice, is two Ells and thre quarters. Although I can give no particular measures of this Cornice, Frieze and Architrave, because such things are not to be seene, yet there is onely so much wall, that hereby a man may conceaue the Fresses, Cognices and Architrave.

The third part of the Ell, wherewith this is measured.



The third Booke.

The fourth Chapter Fol. 27.



Of Antiquitie

Among other faire Antiquities in Rome, there are two Columnes of Marble, all cut full of Historie, very good im-
bott worke. The one is called Antonianas Columne, the other Traians Columne: and soz that Traians
Columne is the whole, I will speake some what hereof. This Columne, as men say, the Carpenter Traian
caused to be made, which is all of Marble, and made of many pieces; but so closely iorned together, that they seeme
to bee all one piece: and to give the particular measure thereof, I will begin at the fote of the Basement thereof: And
first, the degra or step in the first rest, is thre Palmes high, the Plinthus of the Base, is a Palme and eight minutes
high; the exacte or graven Base is as much: the flat of the Basement is 12. Palmes and six minutes high: the graven
Cornice is a Palme and an halfe high. The place where the Feson hangeth in, is two Palmes and ten minutes high: the
whole Base of the Columnes, is five Palmes and 28. minutes, and is divided in this manner: the Plinthus where
the Eagle standeth upon one corner (but you must imagine that there is one at every corner) is 1½ Palmes and ten minutes
high: the Thorus above it, is thre Palmes and eight minutes high: the Cincte is ten minutes high. The
height of the Columne, that is, the body, is 18. Palmes and 9. minutes: the Astragall with the Quadzants or lites under
the Chine, is 10. minutes. The height of the Chine, is 2. Palmes and 2. minutes: the height of the Abacus, is 2.
Palmes & 11. minutes: above upon this Columne, there is a Pedestal of a round forme, through the which men crept fro
the winding Staynes, and may go easly round about, because the plaine ground thereof, is 2. Palmes and a halfe broad:
the height of this Pedestall is 11. Palmes: but the Base is two Palmes, and the Cornice above, is a Palme high. The
Crown above the Pedestall, is thre Palmes and a halfe high: the thicknesse of this Pedestall, is 12. Palmes and ten
minutes: the thicknesse of the Columne above, is 14. Palmes, and the thicknesse below, is 16. Palmes: the round
a se marked A. in flat forme, therewith the thicknesse above: and the Circle marked B. is the thicknesse below. The
widenesse of the winding Staynes, is 3. Palmes, and the Spill soure Palmes. The brewh of the Basement, is 24.
Palmes and 6. minutes; in the which space are cut two Compartmentes, wherein is contained an Epitaph, under which
many Trophies are cut: and in the Epitaph are these letters hereunder written.

S. P. Q. R.
IMP. CAESARI DIVI NERVAE. F. NERVAE.
TRAIANO AVG. GERMANIC. DACICO
PONT. MAX. TRIB. POT. XVII. COS. VI. P.P.
AD DECLARAND VM QVANTAE ALITIV-
DINIS MONS ET LOCVS SIT EGESTVS.

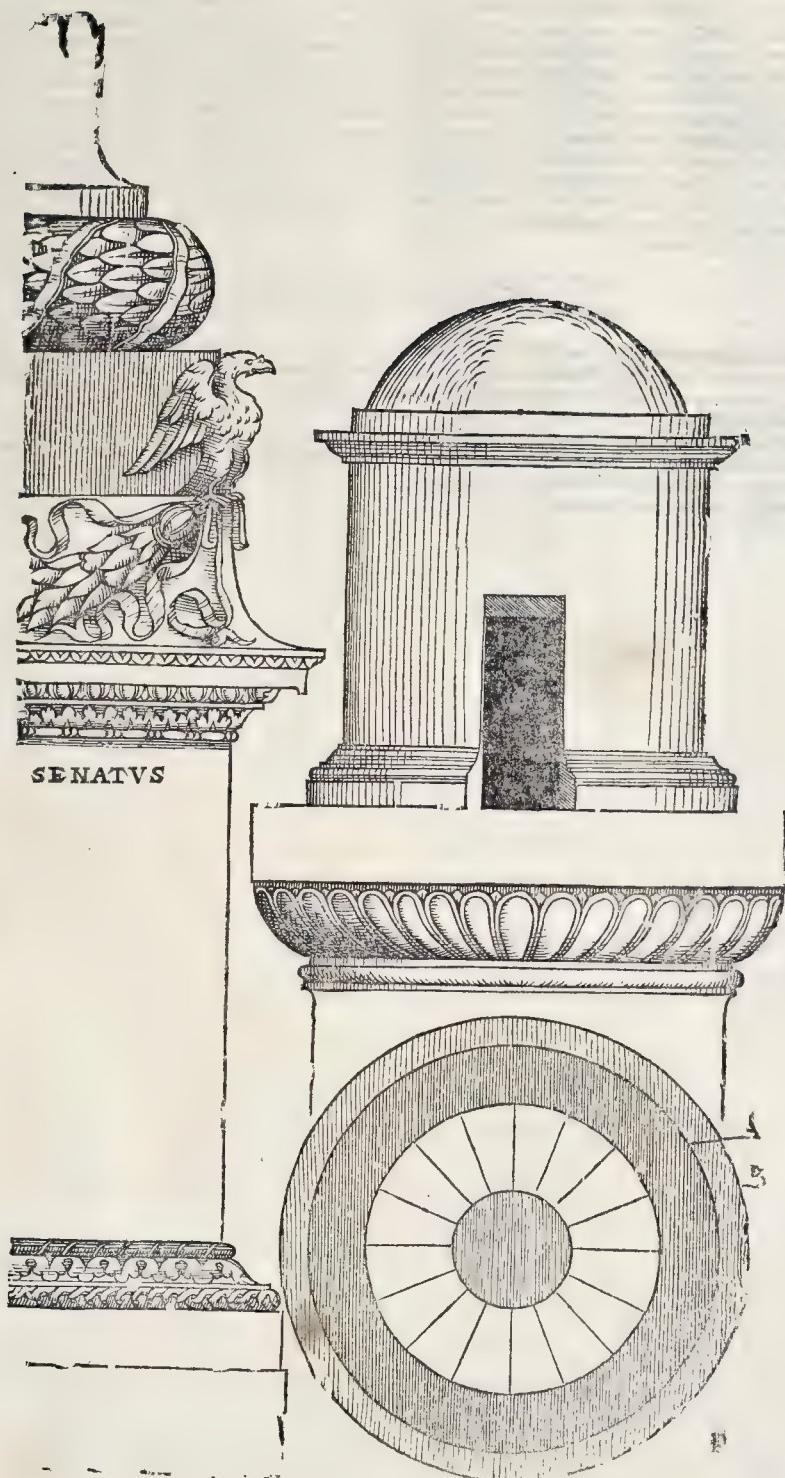
This Columne is historiographed with excellent god cut worke, and dazwne along with Berries; it is also stinkt in
Doxicall maner: in the fumings the Figures are made in such sort, that rising by or bearing out of the Figure, the
forme of the Columnes and fuming, is nothing disparaged, betwene which Figures there stand some Windowes, which
give light to the winding Staynes: and although the said Windowes are placed orderly, yet they hinder not the Historie
at all, and yet they are 44. in number, and I will shew the whole Columne in the Figure following: but these are the
members thereof, openly written and set downe. All these members are measured with the olde Romane Palme, as
you find it before the round.

12. 13.



The third Booke.

The fourth Chapter, Fol. 28.



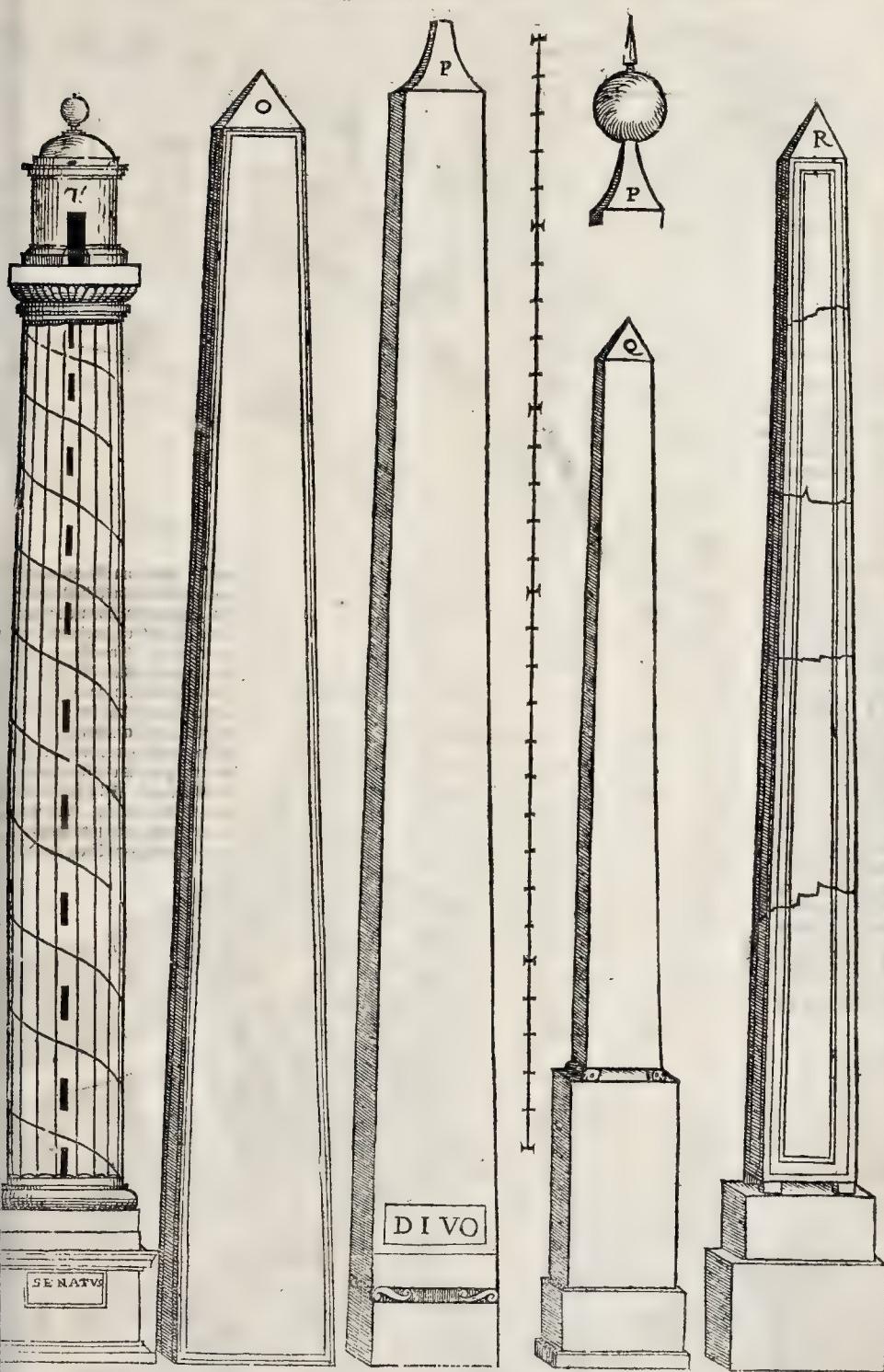
Of Antiquite

I haue before sufficiently spoken of the bredth of Traians Column, and of the particular maner thereof, now I will shew the whole Column proportioned as it is: So then, the Column marked with T, representeth Traians Column: but from whence the Obelisks spring or procede, and how they were brought to Rome, and to what end they serue, I will not speake of, for that Pliny declareth it at large: onely I will set the meausures here, and shew the forme of some things whiche I haue seene and measured within Rome: And first, the Obeliske, marked O, is without the Capena, and is all grauen and cut with Egyptian letters: the thicknesse therof in the fote, is ten Palmes and a halfe: the height is 80. Palmes: and this onely was measured with the ancient Palme: but the other thise by it were measured by a moderate or vsuall Ell of 60. minutes, whereof the line that is betwene the Obelisks, is the halfe, and is divided into 30. parts. The Obeliske marked P, standeth in Vaticano (that is) at S. Peters, and is of Egyptian stone: in the top whereof (they say) the Ashes of the Emperour Gaius Caesar stand: the thicknesse thereof below, is 4. Ells and 42. minutes: the height is 42. Ells and a halfe: the part above, is thise Ells and fourtyn minutes thick: and vnder at the fote standeth these letters.

DIVI CAESARI. DIVI IVLII. F. AVGVSTO. TI.
CAESARI DIVI AVGVSTI. F. AVGVSTO SACRVM.

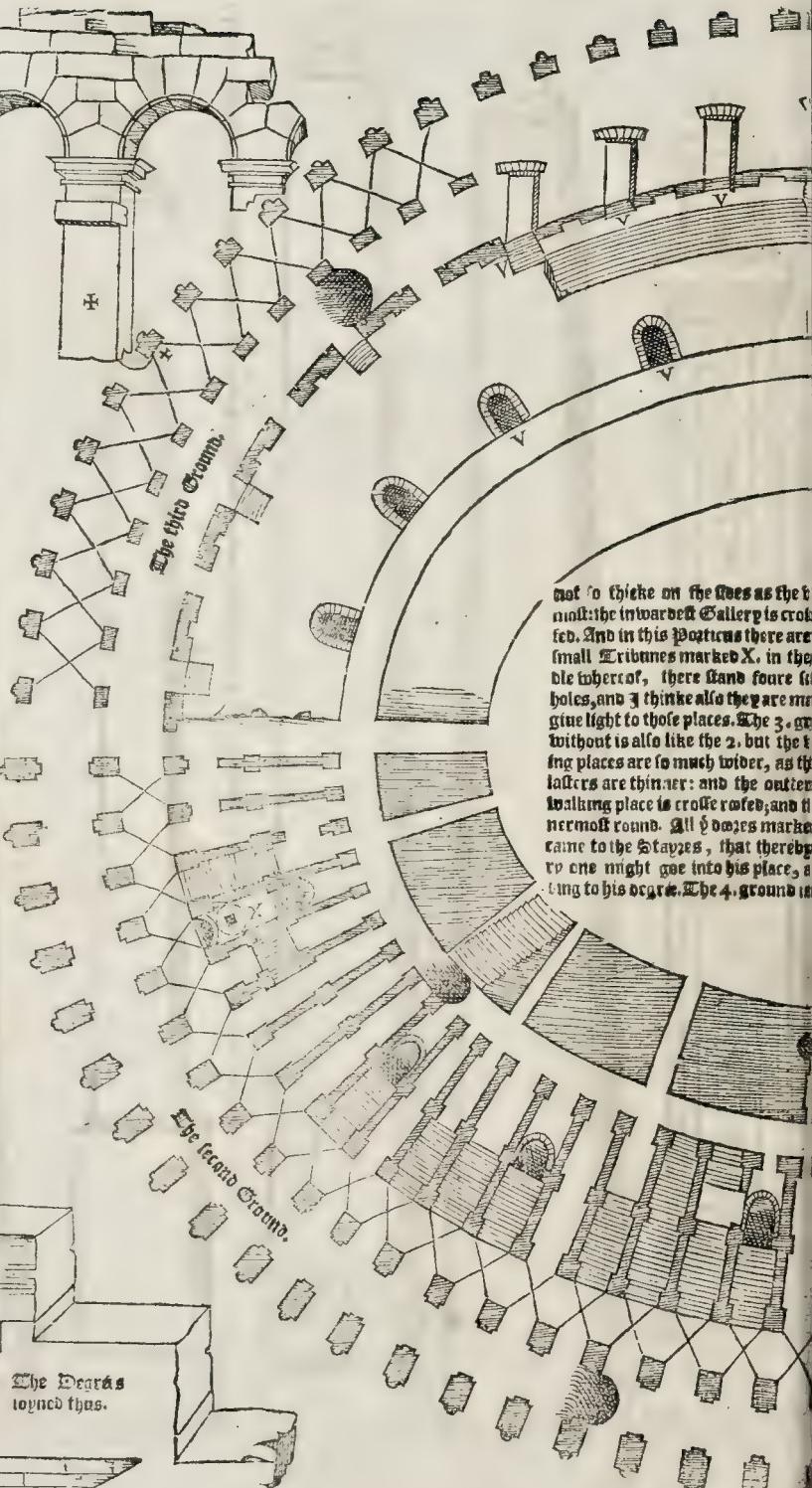
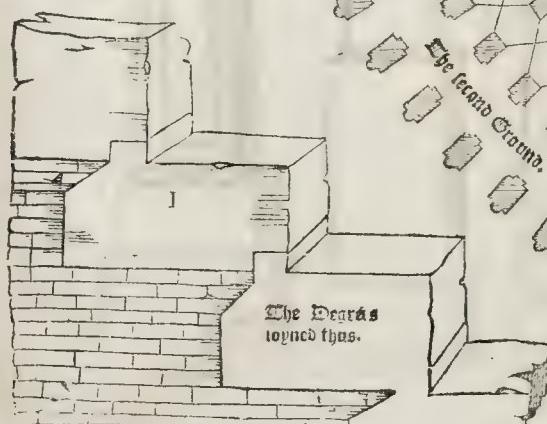
The Obeliske marked Q, lyeth at S. Rochus, broken in the middle of the fote in thre pieces, and men say likewise, where lyeth buried in the earth a Labie called A la Augusta: the thickenesse beneath of the said Obeliske on each Facie, is two Ells and 24. minutes: the height is 26. Ells and 24. minutes: the thickenesse aboue, holdeth an Ell and 35. minutes: the Basement was all of one piece, and the Obeliske marked R, is in circa Antonino Caracalla, and is broken, as you see in the forme. The thickenesse of the Obeliske, is two Ells and 25. minutes below, and aboue one Ell and 33. minutes: the height is 28. Ells, and 16. minutes; and all the Pedestals are propozed therafter. And althoough (peraduenture) there are more of them in Rome, which I haue not seene, yet these whiche I haue seene, are here set downe to your sight, as being best knowne.

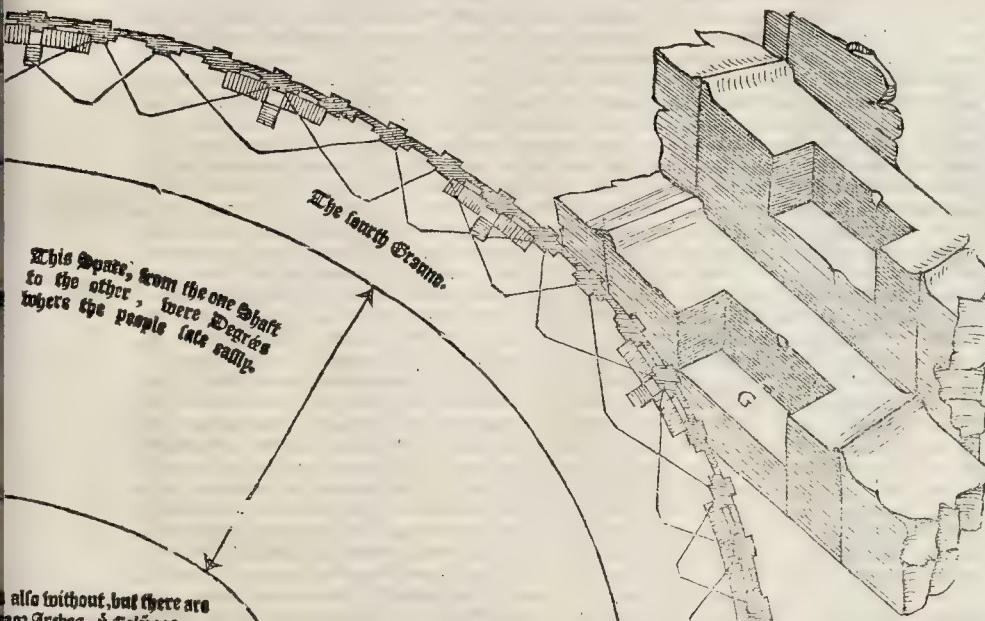
The third Bookel. The fourth Chapter. Fol. 29



Of Antiquities

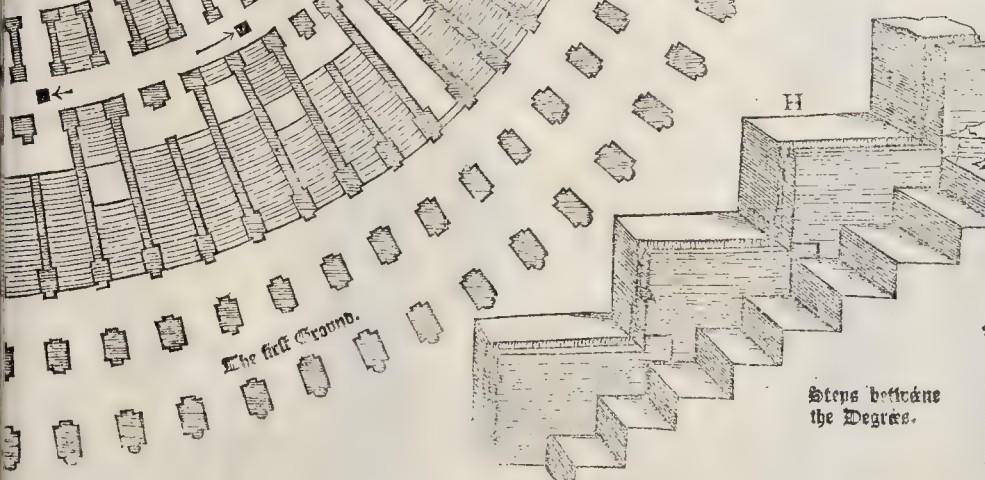
THIS Amphitheater of Rome, called Colisseo, Vespasianus the Emperour caused to bee made in the middle of the City, as Augustus had appointed it before: the Ichnographie I have divided into 4. parts (as the building is of 4. Orders) that you may understand it the better, because of the great artificialnesse thereof. This ground is measured by the ancient Palme: and first, beginning at the outermost parts: The Pilasters before are 10. Palmes and 6. minutes broad: the thicknes of the Columnne is four Palmes; but the Pilaster on either side is thas Palmes and 2. minutes: the widenes betwixne y Pilasters is 10. Palmes; but the 4. principall goings through hold 22. Palms: the largenesse of the Platters in the sides re 12. Palms. The wideness of the 1st Porticos is 22. Palms. The 2. Porticos inwards, is 20. Palms bwtw. & both of them roched. The other measures towards the Center, because they lessen themselves, I will not set downe, but by these outward you may conceave it, because they are all proportioned according to the same: the outermost part of the 2. Ichnographie is like the 1. but the Galleries are a Palme broader: for the Pilasters are





also without, but there are no Arches, & Colunes are spaces betwene both, there are, as you shall see in the Drawing, This 4. & last ground, maybe whether the whole space 2. walking places w^s easly, only for y^t it is so much de- mā can se no signes of Pi- in; but in the outward part some beginnings of Arches & short ioyned to the wall, ad the welsh; & men did clim- ps, y^t were fast to the wall, as overland, to the outermost

windo^{ws}, as you may better conceiue of it in y^t profil, on y^t side of y^t staires in y^t figure following. The spaces, as well as y^t shafts, contayne y^t staires or degrees for men to sit on; & every degree was so broad y^t a man sitting easly, might go upon the same without troubling another: within these degrees there were less staires, & easly every man might go into his place, as in y^t figure G. & H. is shewed: in which degrees, there are some hollow Cylane^s, from the top to y^t bottom, to avert the water downwards; as also for mens water, as you may see in the figure H. These de- grees to sit on, hung downward a good fayre, that no water shold stay upon y^t them; which degrees were excellently holtyned together, as in the figure I. sheweth;



Steps betwene
the Degrees.

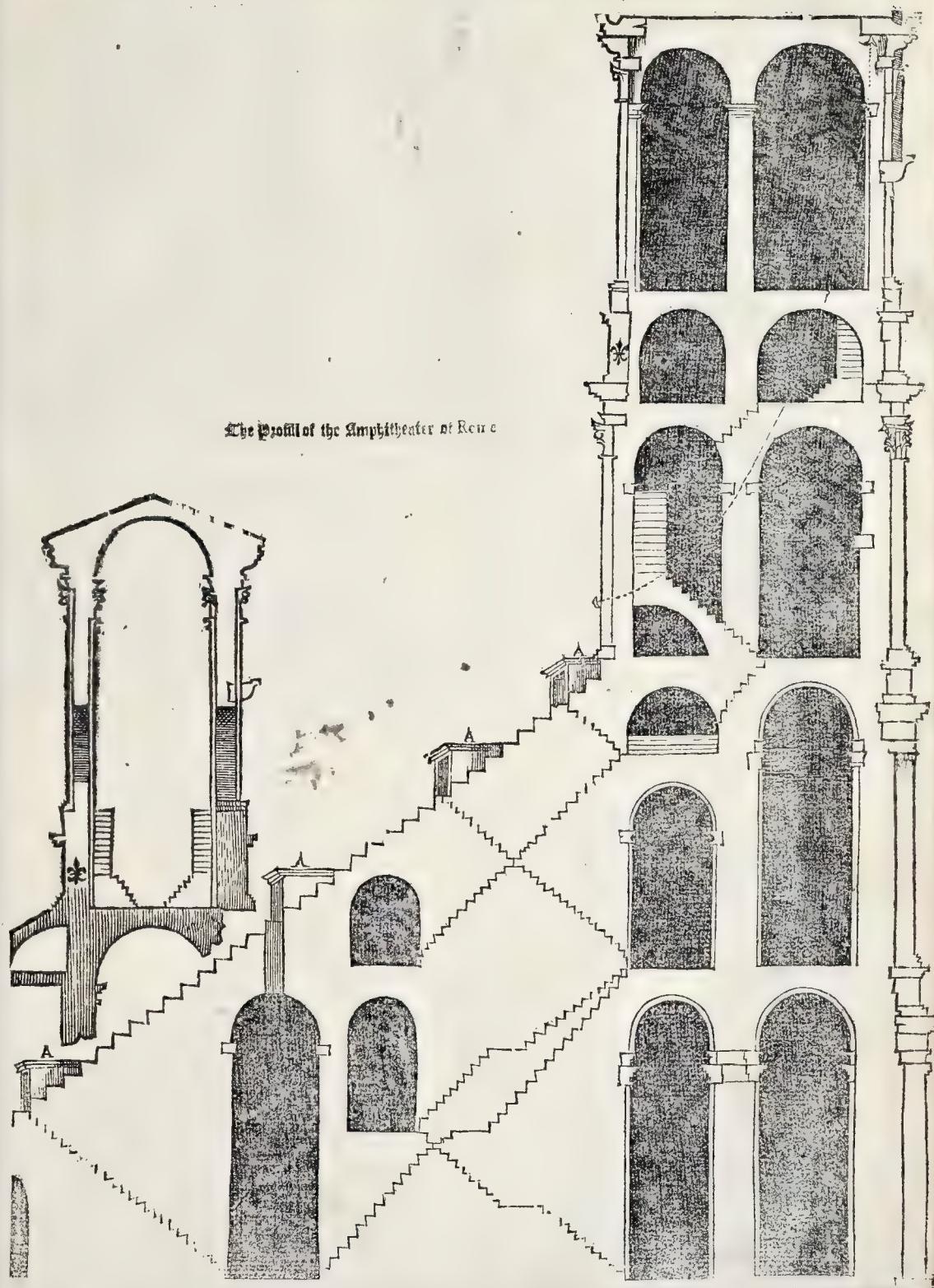
Of Antiquitie

I haue shewed the Technographie of the Romish Coliso, in fourre sortes, euerlike as the building is of fourre sortes or orders: now I must shew the Profil thereof, by the whiche a man may conceate a great part of the inward thinges: & therefore the Figure following sheweth the whole building of one y^e earth, as if it were cut throught in the middle. In which Figure, first you see all the degress wheron the Spectatores sat: there also you may perceve how many wayes the going vp were, whch (in truth) were very easie to go vp & downe, so that in shott time the Amphitheater was filled with a great number of men, without hindrance one of another. You may also see in the outward part, how the thicknes of the Wallers, and the walles vpwards lessened, which on the insidē are drawne in, and being so drawne in, giveth the building great strength: and to shew it to be true, you may se there, at this day, some part of the Facies without, yet whole, from the top to the bottome, and yet the inward parts are decayed, and that hath the drawing inward of the Cencere done, whch made the iorke sligher, taking, as it were, a forme of a Piramides. But this is not observed in the common building in Vnecce, but rather the contrary, because the walles without are in Perpendicular manner, and lesen inwards: and this they doe (for want of ground) to get the more space by woods, but that whiche helpeth such buildings, is, that there are no Arches in it, ney Roofs, of any maner, that force the walles to give out, but the number of Beams whch are laid and fastned in the walles, binde the walles and the roomes of the house together, and so such buildings stand fast so long as the Beames endure, which men from time to time renue: neverthelesse, these kinds of buildings last not so long as the ancient buildings did, made in such order as you see in the Coliso, wheresof I will speake agayne. And without, (as I sayd) the innermost part being so ruinous, that men see no part of the innermost worke, whch is cut off by the line that hath Shafts or Arrowheads at the ends: and for that you see no parts thereof at all, whether that the uppemost parts of the high^e Steps, vpwards to the top, were all couered with double Galleries, or that the Porticus was alone, and the other left open: therefore I haue made it in two maner of wayes: the one is (as you see in the same Profil) ioyned with all the worke: and the other maner is, which standeth without the degress or steps, whch order also agreeith with the other, if you set it so, that the two Lids in the Pedestals meete each with the other: but for that you see some remaynders of the crostid Roofs, which yet hang within on the walles, at the fourth ground therewith, the whiche, I judge, was onely a Porticus, and that the other part was uncouered to receire the people, and being so must receive them better then if the Galleries had bene double: Now to turne to the beginning of the degress or steps that I haue nothing untouched, as nide as I can, I say, by meanes of the ruines, and filling vp with matter fallen, the plaine, or the place in t^e middle is so filled vp, that a man cannot marke how high the first degress of the plaine were elevated: but by the iastructions of those that haue seen the end, the first degress was so high, that the wild and untamed Beasts could not hurt the beholders: and there was also a Boistwering and other strectes, of a reasonable breadth to go round about, as it is shewed where it is marked with C. The two open places, the least and the greatest Arch, were to bring in light. The places standing vp above the degress or steps which are couered and marked A, are Dores, whereby men went without, vp the Staynes to the Theater.

The third Booke.

The fourth Chapter. Fol. 31.

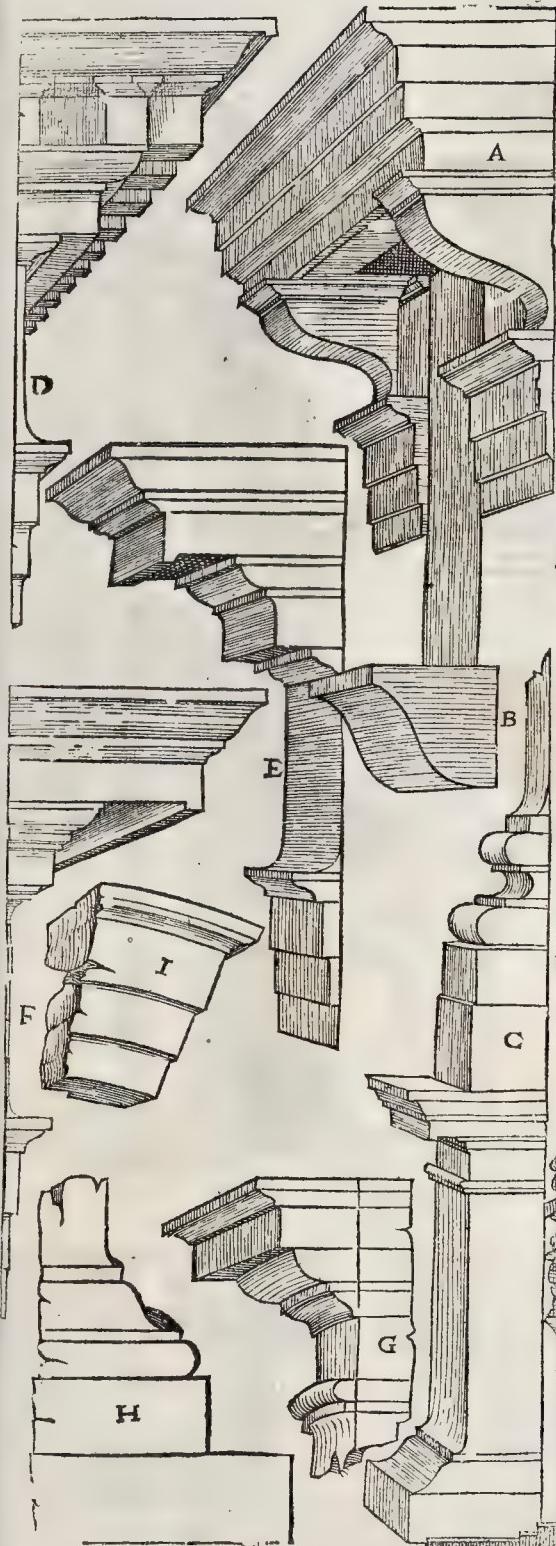
The Profil of the Amphitheater of Roue



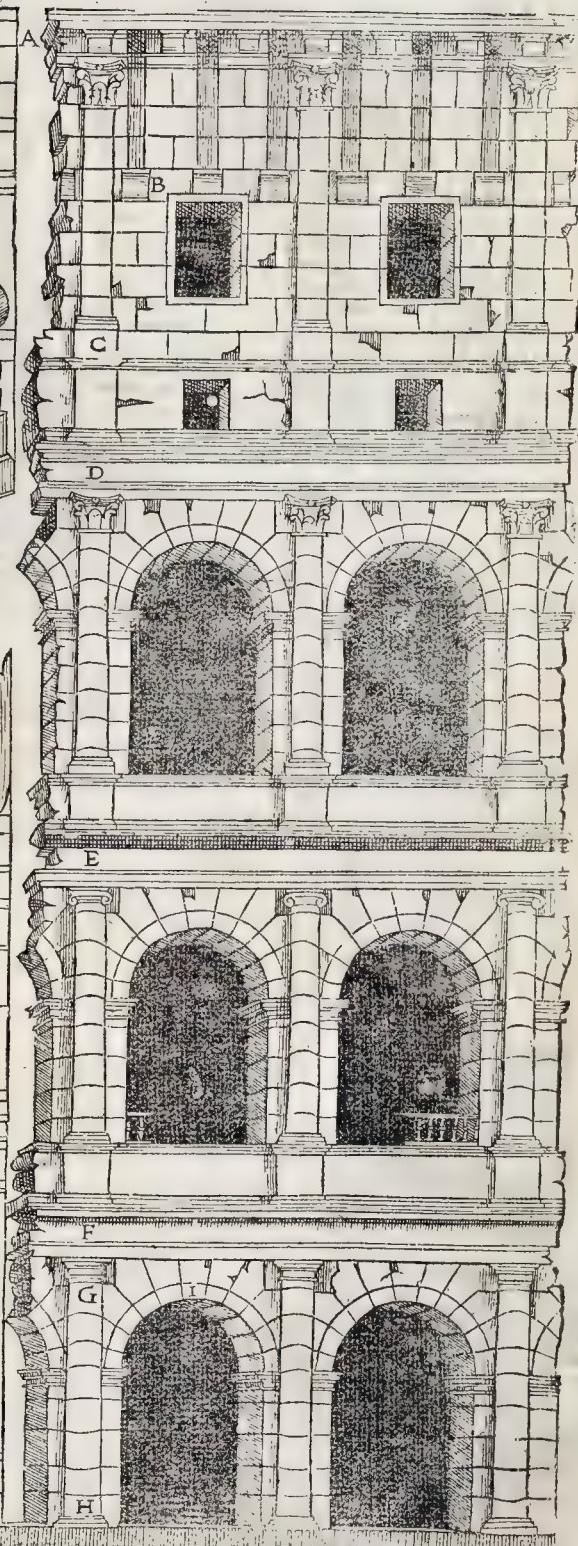
Of Antiquitie

The outward part, that is, the Orthographic of the Romish Coliseo, is made of four stories: and the first story in reaboue the ground, is made after the manner of Dorica: and although there are in the Frēse neither Triglyphes nor Octophyes, nor yet outs in the Epitole or Architrave; neither Fulmines and guts vnder the crowne, yet it may be calld Dorica. The second Oder, is after the manner of Ionica: and although the Columnnes be not fluted, yet in effect they may be calld Ionica. The third Story, is after the manner of Corinthia, but firme wroke without cutting, unles it be the Capitals, the which with their heighth are not exquisitely made. The fourth Story, is Composita, other call it Lacina, because it was invented by the Romanes: some others call it Italica. But it may well be calld Composta, were it but for the mutiles which stand in the Frēse, for that no other Story hath their mutiles in the Frēse, but that. Many men alioy the Romanes made this Building of four Orders, and made it not all of one forme or oider as many others are, as that of Verona, which is all of rusteall wroke, and that of Pola also. A man may answere thereto, that the old Romanes, as rulers ouer al, especially of those people, from whence the thre former Orders had their beginning, would set those 3. generations one aboue another: & about all those orders, the Composta, as sound by themselves; therby signifying, that they as tryomphers ouer those people, would also triumph with their wrokes, placing and mingling them at their pleasures. But omitting these reasons, we will proceed to the measures of the outtermost parts and Orthographic. This Building was elevated from the earth two degrees: the second degree was five Palmes broad, and the first two Palmes: the height was little lesse then a Palme: the Bafe of the Column was not two Palmes, no more is the Dorica: the Column is four Palmes thicke and two minutes: the height is 38. Palms and 5. minutes, with Bafe and Capital: the height of the Capital is about two Palmes: the Pilasters on either side of the Columnnes, are thre Palmes and three minutes: the widenesse of the Arch is twenty Palmes, and the height is 33. Palmes: from vnder the Arch, to the Architrave, is five Palmes and five minutes: the height of the Architrave is two Palmes and eyght minutes: the height of the Frēse is thre Palmes and two minutes: the Cornice as much. The Pergall of the second Oder, is eight Palmes and ten minutes high: the height of the Columnnes, with Basys and Capitals, is five and thirty Palmes, the thicknesse is four Palmes: the Pilasters and Arches are like those beneath: but the height of the Arch is thirty Palmes: from vnder the Arch, to vnder the Architrave, is five Palmes and five minutes: the height of the Architrave is thre Palmes: the height of the Frēse, is two Palmes and nine minutes: the height of the Cornice, is thre Palmes and nine minutes. The Pergall of the fourth Oder, called, Composita, (here our Author hath forgotten the third Oder, but howsoever, it differeth not much from the Ionica) the Pergall of the Composita, is twelve Palmes high: the vnder-Bafe thereof, is four Palmes: the height of the Pillars, with Basys and Capitals, is thirty eech Palmes and sixe minutes: the height of the Architrave, Frēse, and Cornice, is about ten Palmes, dwelled in thre, one part for the Cornice, the second for the Frēse, wherein the Mutiles stand, and the third for the Architrave. But so; what cause, or reason, the werkeman set the Mutiles in the Frēse, (things, which, peraduenture, before that time were never made) I haue delivered my opinion thereof in my fourth Booke, in the beginning of the Order of Composita. The Pillars of the fourth Oder are flat, and rise but a little: all the rest are round Columnnes, (that is to say) halfe fourth parts, rising out of the Pilasters: the Mutiles above the windowes vpheld some beames, the which are boared through with holes for men to draw cords to cover the hole Amphitheater, as well againts the Sunne as the raine: for what cause the Columnnes are all of one thicknesse, and lessen not one moze then the other (as it semeth they shoulde; and as Virtuous woulde) as the second Oder are lessened a fourth part, I haue also declared my opinion in the fourth Booke, and the ninth Chapter. In the treatise of making Columnnes, longer or shorter; and that the particular members may also be noted, I haue marked them also by the Orthographic of the Coliseo, which are proportioned according to the principall, together with their Caracters whereto they are likened.

The third Booke.

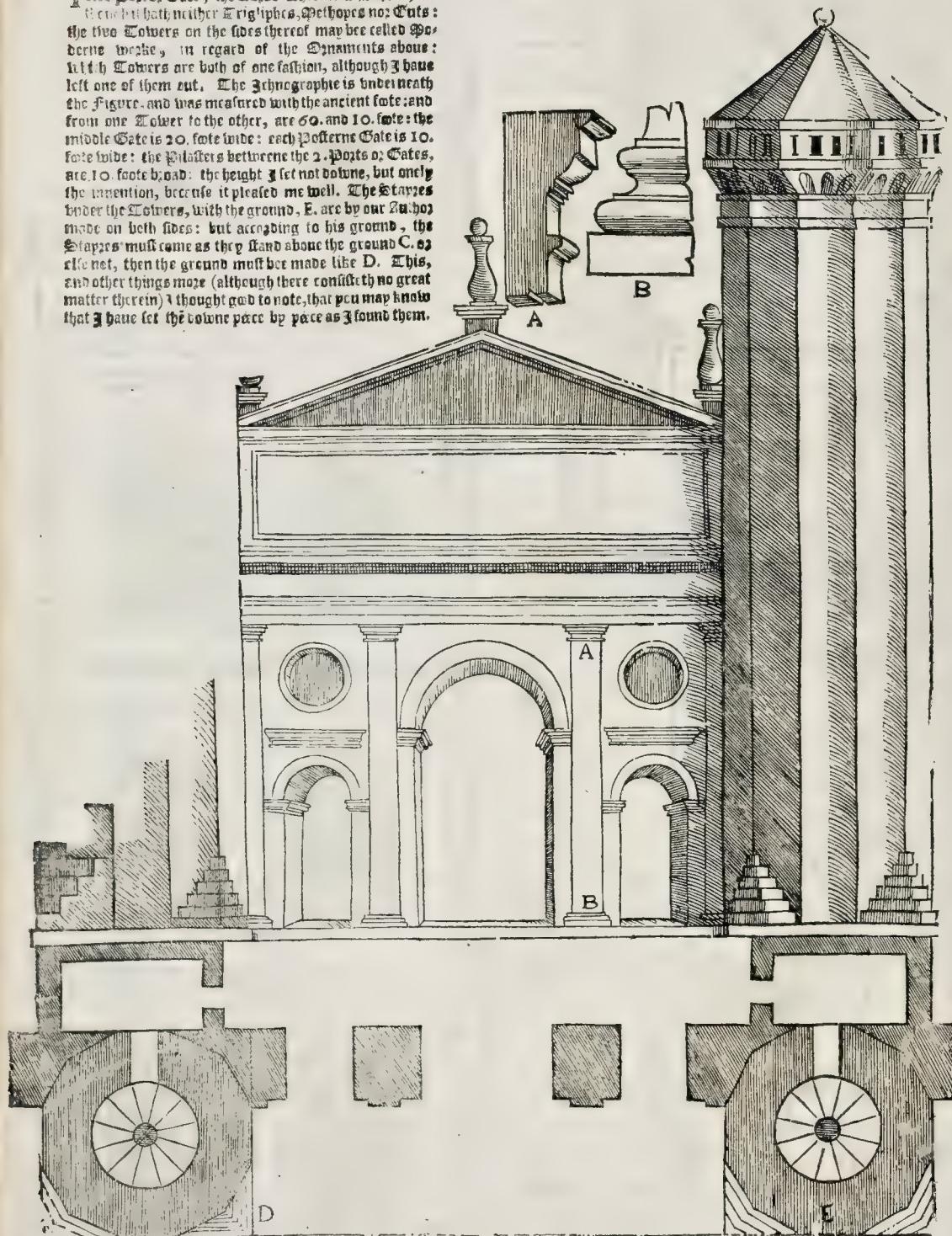


The fourth Chapter. Fol. 32.



Of Antiquitie

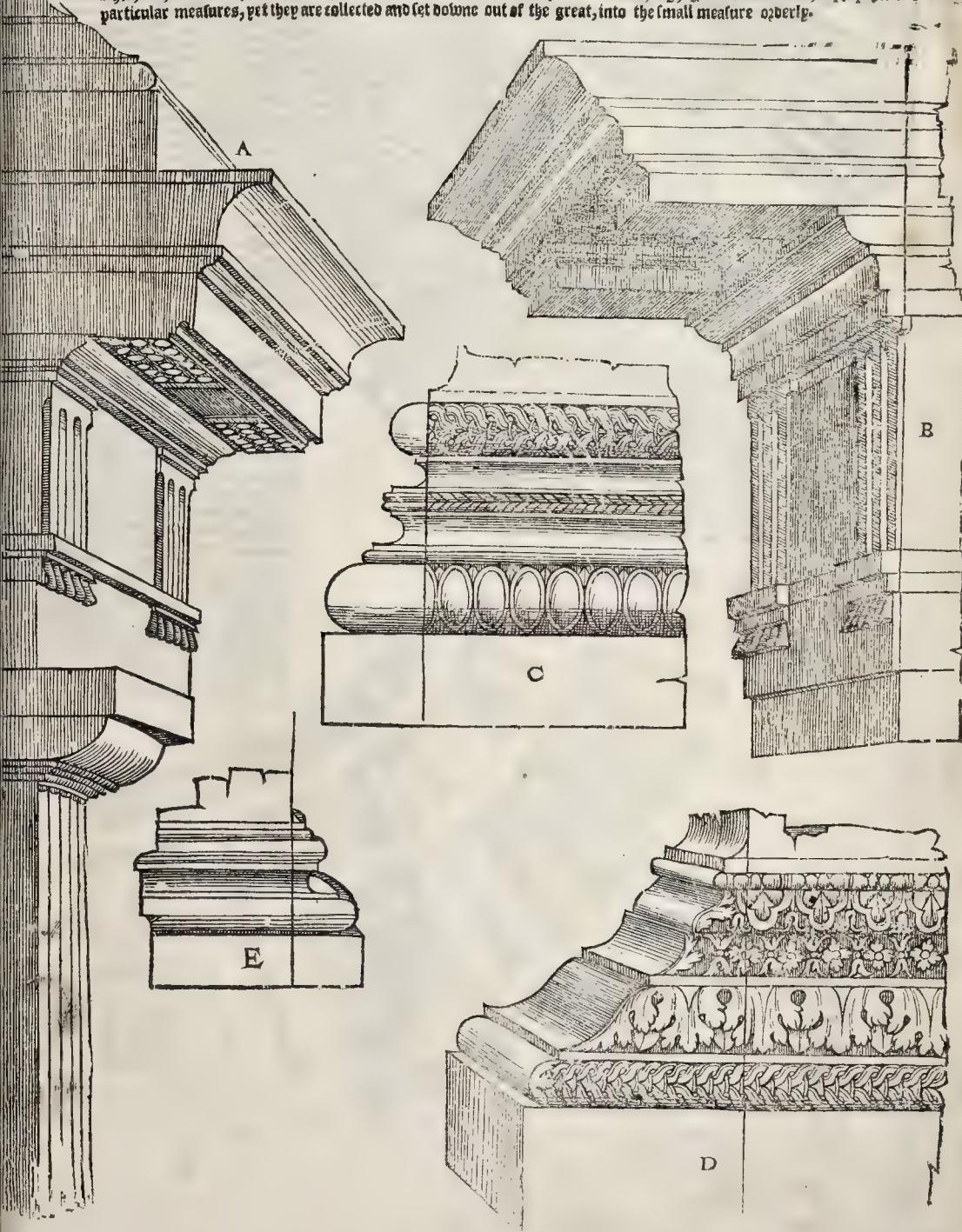
In Pispolo, a very old Tertre in Italy, there is a very
old Port or Gate, the worke whereof is Dorica, al-
though it hath neither Triglyphes, nor Hinges nor Cuts:
The two Towers on the sides thereof may bee called Po-
derne worke, in regard of the Ornamentts aboue:
With Towers are both of one fashion, although I haue
left one of them out. The Ichneographie is underneath
the Figure, and was measured with the ancient stote: and
from one Tower to the other, are 60. and 10. stote: the
middle Gate is 20. stote wide: each Postern Gate is 10.
stote wide: the Plasteres betwene the 2. Posts or Gates,
are 10. stote broad: the height I set not downe, but only
the intention, because it pleased me well. The Starzes
vnder the Towers, with the ground, E. are by our Author
made on both sides: but according to his ground, the
Starzes must come as they stand above the ground C. as
else not, then the ground must bee made like D. This,
and other things more (although there consisteth no great
matter therein) I thought good to note, that you may know
that I haue set the worke piece by piece as I found them.

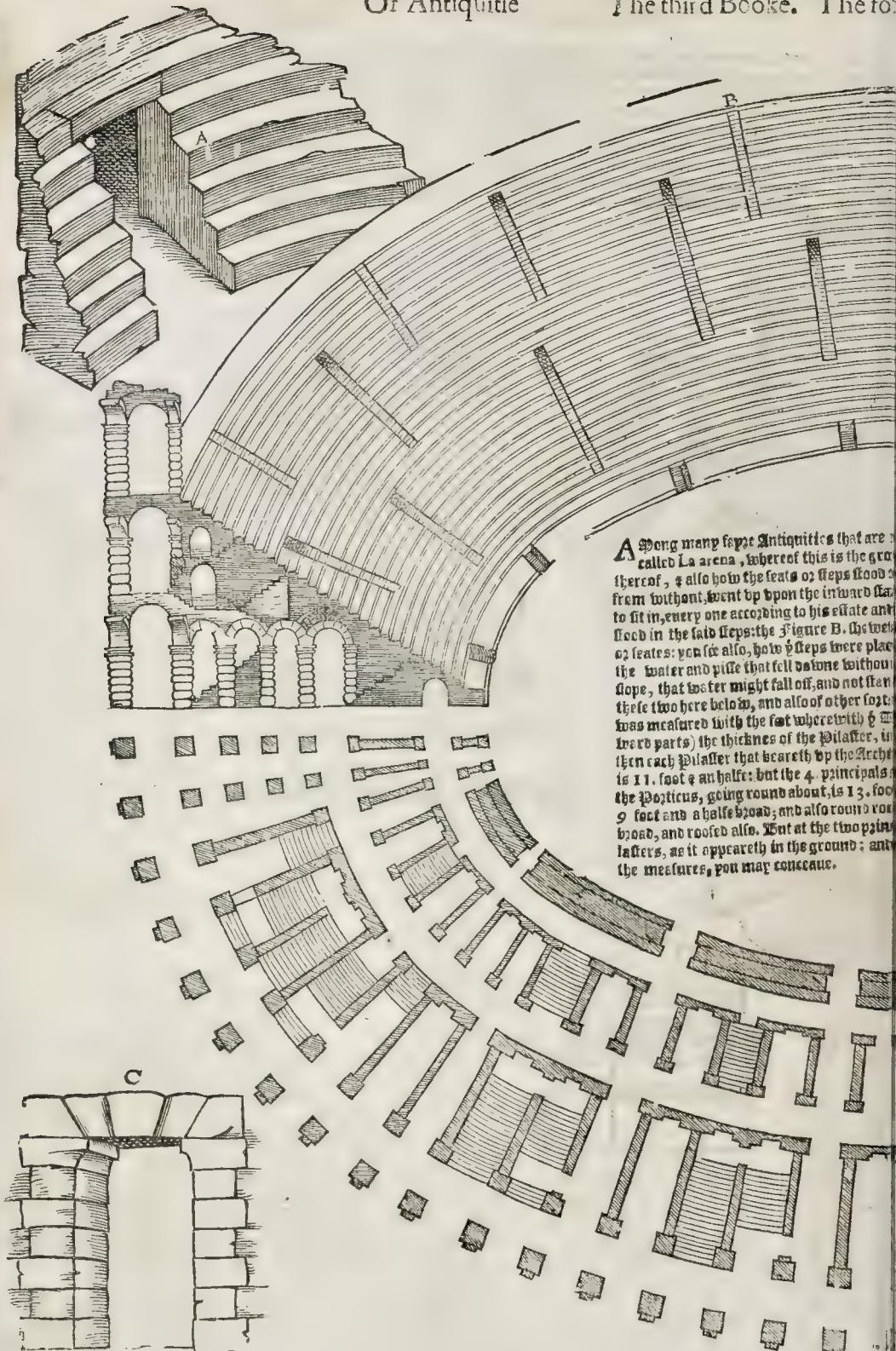


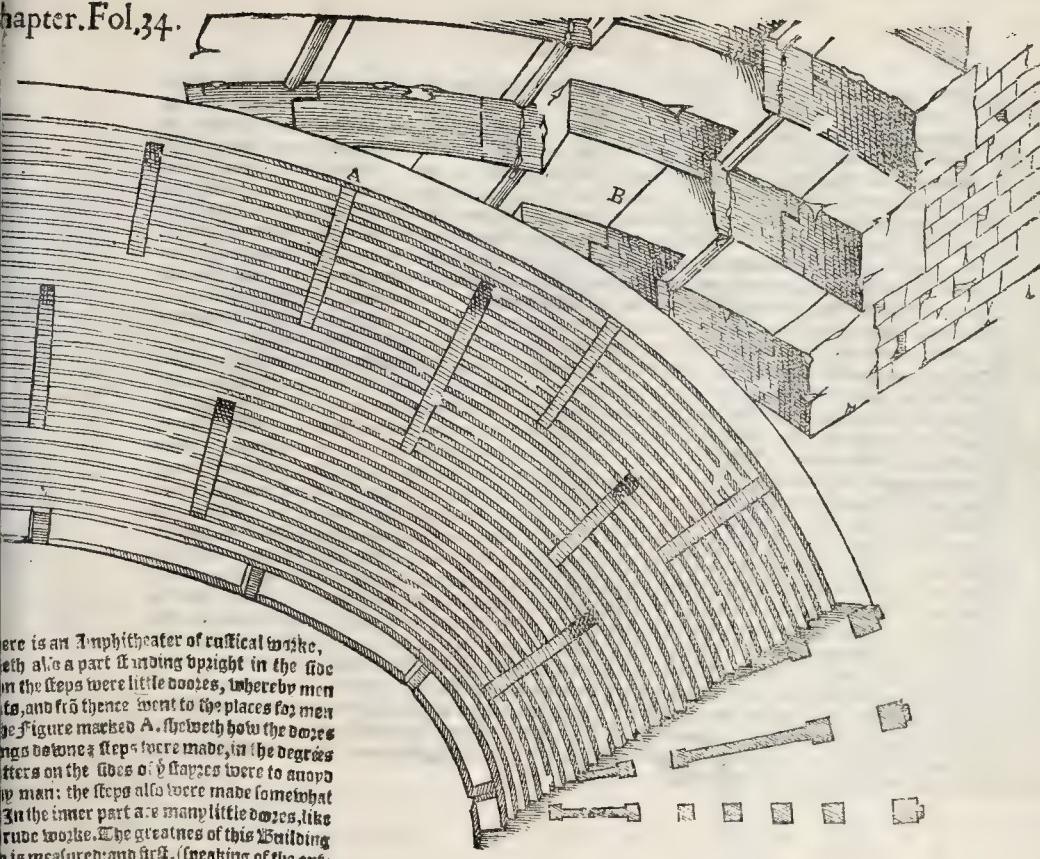
The third Booke.

The fourth Chapter, Fol. 33.

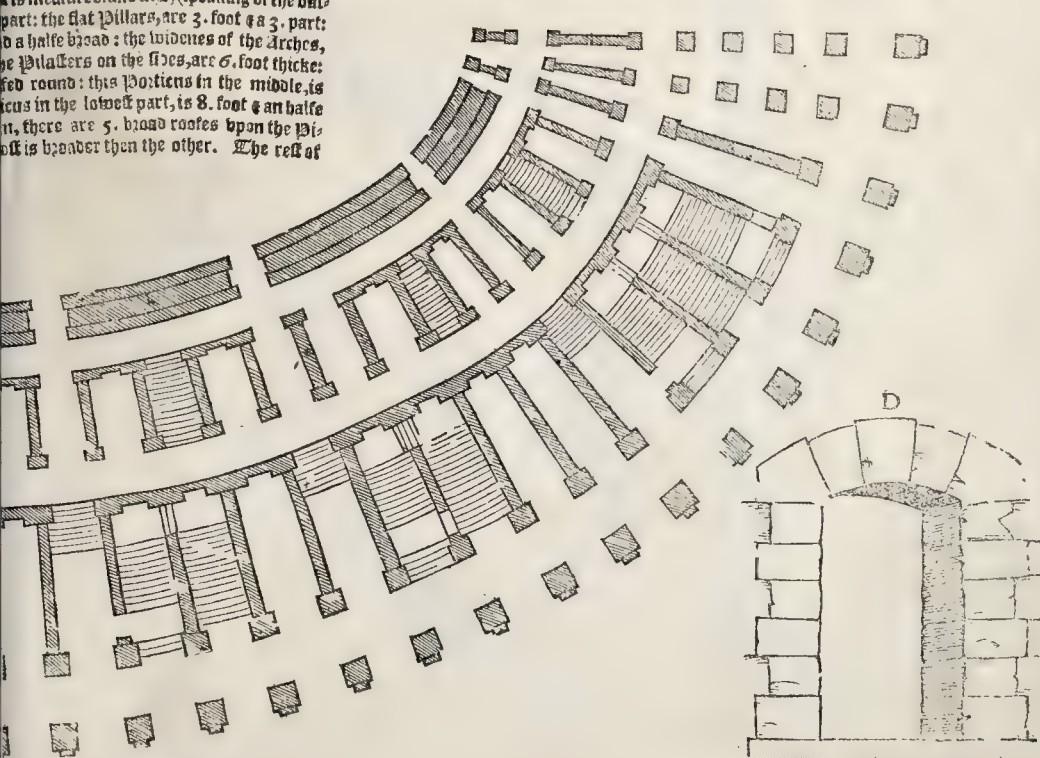
Veles Cornices, Basements & Bases, are reliques of Antiquitie: and that which is marked A. a pieces of the Columnes with Architraves, Frises & Cornices; and also with the Basement above, which was all of one stone: the height therof was 11. ancient foot, proportioned in that manner, was found without Rome by the Riber of Tiber. The other marked B. was found in the foundation of S. Peters, and Bramante caused it to bee tried againe in the ground, in the same place: all the members also were of one piece; it was 6. ancient foot high, & proportioned thereafter. The Base marked C. is at S. Markes, very well wrought, of Corinthia worke, but not very great, it is a foot & an halfe high, and proportioned accordingly. The Basement marked D. was found in a place called Capranica, very well wrought: the height of the Base, without Plinthus, is 2. Palmes, and also proportioned thereafter. The Base marked E. was not very great: it was found among certayne ruines, and by reason of the Abstruseness which it had above the Thorus, therefore I esteem it to bee Composita: and althoongh I set downe no other proportion of all the particular measures, yet they are collected and set downe out of the great, into the small measure orderly.







ere is an Amphitheater of rustical worke,
with also a part standing upright in the side
in the steps were little doores, whereby men
ent, and so thence went to the places for men
the Figure marked A. Sheweth how the doores
wroke downe a step were made, in the degrees
wch on the sides of h' slayres were to annoyd
so man; the steps also were made somewhat
In the inner part are many little doores, like
rude worke. The greatness of this Building
is measured and first, (speaking of the out-
part) the flat Pillars, are 3. foot & a 3. part:
to a halfe broad: the widenes of the Arches,
the Pilasters on the sides, are 5. foot thick;
set round: this Portions in the middle, is
wch in the lowest part, is 8. foot & an halfe
in, there are 5. broad rooves upon the Pi-
lars is broader than the other. The rest of

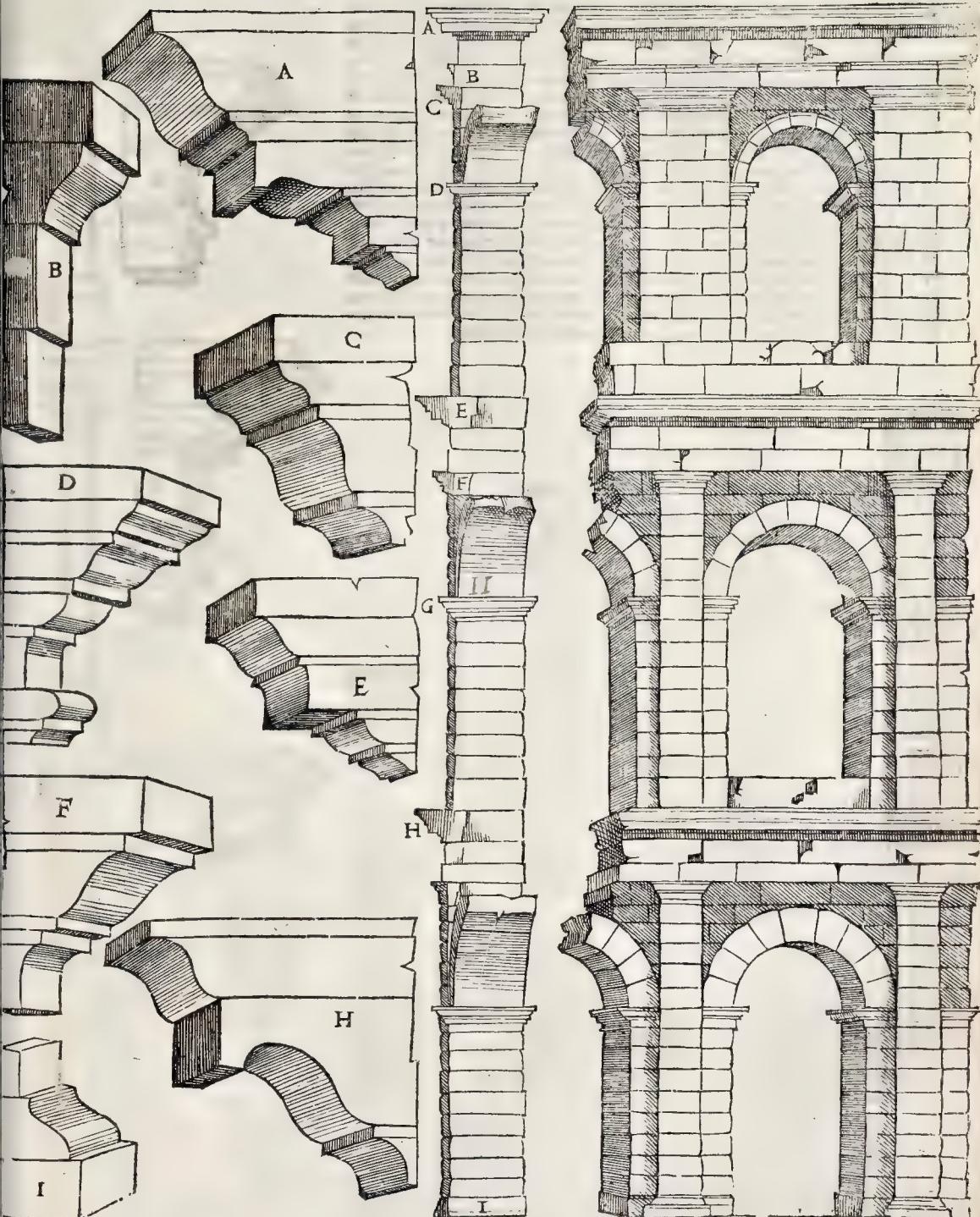


Of Antiquitie

Touching the Zchnographic of the layd Amphitheater, I haue set downe the p[ri]ncipall measures, and partly spoken of that part whiche standeth bright: now I will speake of the outward part, which worke can no other wise be called, then rude and rusticall, and haue likewise spoken of the thicknesse and breadth, therefore I will rehearse it no more: onely of the heighth I will say some thing: And first, the heighth of the first Arch is 23. fote: the heighth of the Pillars 27 fote: the Forme of the Architeave, Frise and Cornice, is 6. fote high: the place brest high aboue the Corner, is 2. fote and a halfe high: the heighth of the second Arch is 24. fote, and his widenesse 13. fote: the heighth of the Pillars is 24. fote and a halfe: the heighth of the Cornice, Frise and Forme of the Architrave, is 5. fote and a halfe: the Bostwering or Place brest high of the third Order or Story, is 4. fote and a halfe high: the widenesse of the Arch is 9. fote and 3. quarters: the heighth of the Arch is 17. fote and a halfe: the heighth of the broad Pillars is 20. fote and a halfe: against these Pillars, as farre as a man may perceiue, there were Images, of god bignesse, set: the third and last Cornice is 5. fote high. But I will not set downe the particular meatures of the Cornices, for that I haue set them downe with great diligence, according to the greatnessse in this small Forme, which shall be the first Figures in the side following, and there below, the Profil or cutting of the outermost part of the Amphitheater shall stand. And thirdly, there followeth the Orthographie of a parte of the layd Amphitheater without, which is all wrought after the rusticall manner, with stones of Verona, being very hard: but the Cornices are somewhat better made: which Cornices haue divers and severall Formes of the Romanes, and are very like unto the Cornices of the Amphitheater of Pola. Touching the playnnesse of this Amphitheater, which by the Common people is called, La arena, (taken from arena) which is sand, which was therein strowed for certayne Playes or sports, which were there presented or Acted: and therefore I could not see the ground thereof: but as it was tolde me by some old men of Verona, when the Playes were there made upon the sand, then presently there came water, in the sight of all the beholders, which past through some Cenduits, and in short space filled all the placefull, so that there they might make battailes, and thyll one at another with Scurtes and Boates, in the water, and the place dyed by agayne, as at the first. This, and many other things, men may belieue, if we consider the great magnificence of the Romanes, in the Antiquities of Verona. There are yet upon the great River of Adige two fayre ancient Bridges, betwene the whiche two Bridges, there was a most fayre and notable Spectacle, whereon there might stand a great number of people, to behold the Playes and sports there made in Boates, upon the water: which Spectacle was made along by the water side, against a hill: and higher bywards, abone this Spectacle, there was a Theater, the Scene wherof, and the Spectacle ioyned together: (and for that, as I said before, the Theater was made very artificially in the hill, so is it abone the Theater in the height of the hill) there was a great building, which surpassted all the other: but the ruines of these buildings are so many, and so cast downe in processe of time, that it would be great charges and losse of time to find them out: but for that in many places of the hill I haue seene some parts thereof, therefore it makes me wonder therat. It was also, with god reason, that the Romanes made such things at Verona (for that, in my opinion, it is the best situated place of all Italy) as well for playnes as hilles, and also for waters; and specially, the men of that Towlone are very familiar and friendly people.

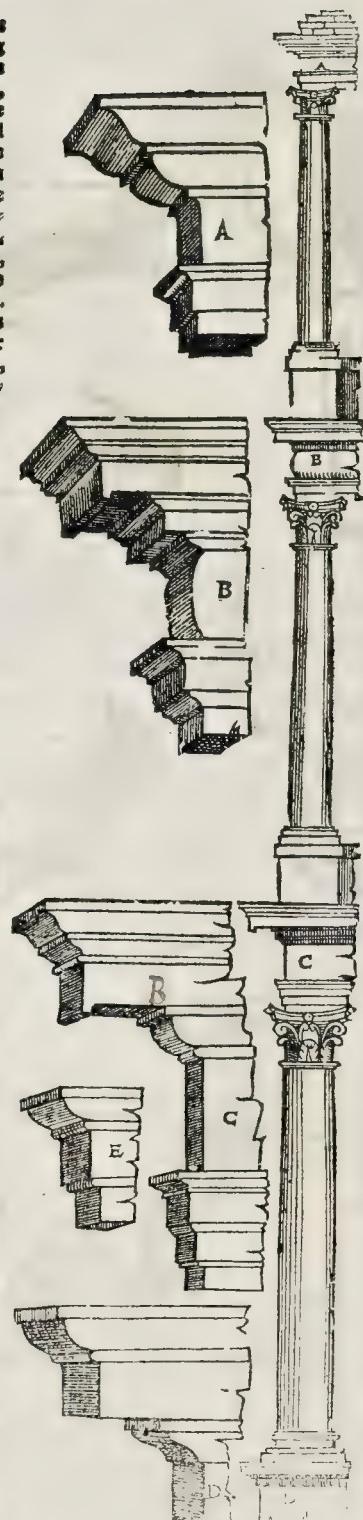
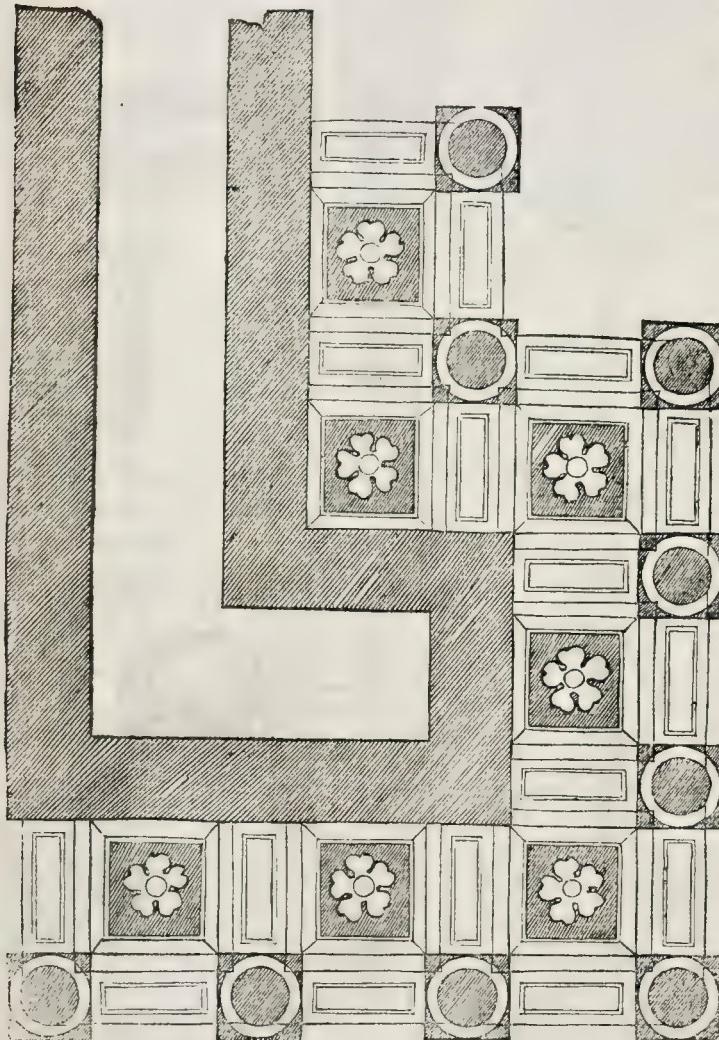
The third Booke.

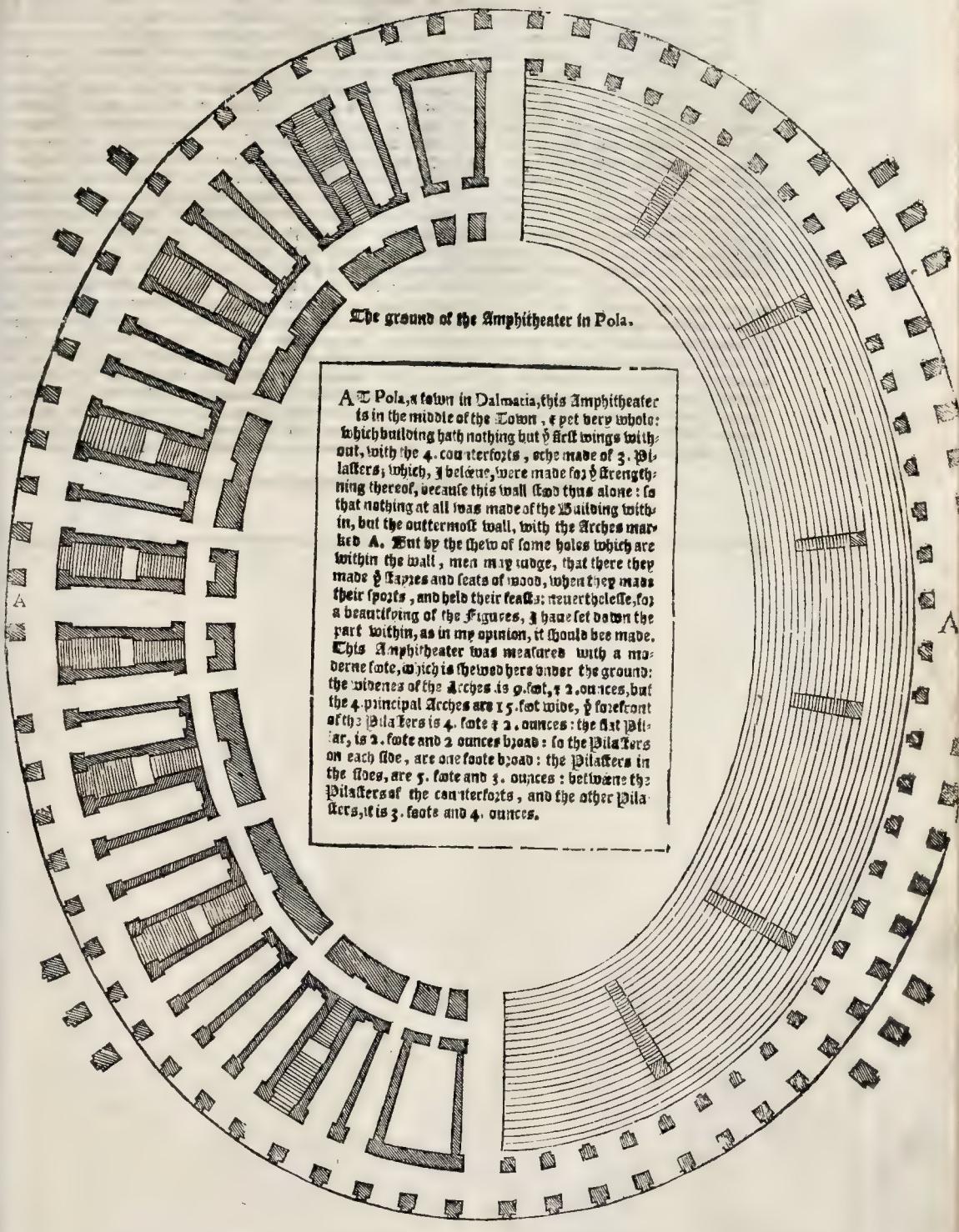
The fourth Chapter. Fol. 35



Of Antiquitie

Great things, and in divers formes, were made by the famous Romanes; but by the
Gaines thereof men can not judge wherunto they served, & principally this Building
which was named Lescere Zone di Seucor: of which Building you se a copie of the
Heale yet standing, which is of 3. rofes, all Corinthia worke. But it may be sene,
that from the rofe it was made of another manner of Buildings, because some Pillars were
hollowed and crested, and some smooth; besides, the Capitals and other formes are not all
of one worke. I have not measured the heigh of this Building, but only the ground and
thicknesse of thinges: and so farre as I can conceave, the rooses above lessin one more then
another, the south part, as Vieruvius writes in his description of Theaters. This Figure
heremder sheweth the ground of the Building, & also the skin or roose of the Lacunary ab-
bove the Columnes: it was measured with the foote that measured the Theater of Pela-
gion, the thicknesse of the Wall, is 3. fot and an halfe: betwene the one Wall & the other,
it is 4. fot and an halfe: betwene the Wall and the Columnes, is 5. fot and 3. quarters: and
so is the spae betwene the Columnes: the thicknesse of a Column is 2. fot and 4. quarters.
In this Building pouer no Chambers at all, nor any shew of Stappes, or goings
up unto the lodgings: but men may conceave, that it was much greater, and that in other
places both Stappes and Chambers might haue stood; and to speake trouth, this Building,
when it was whole, was a notable piece of worke, in regard of the great number of Co-
lumnes and Pillars that were in it, together with the costly worke therof.

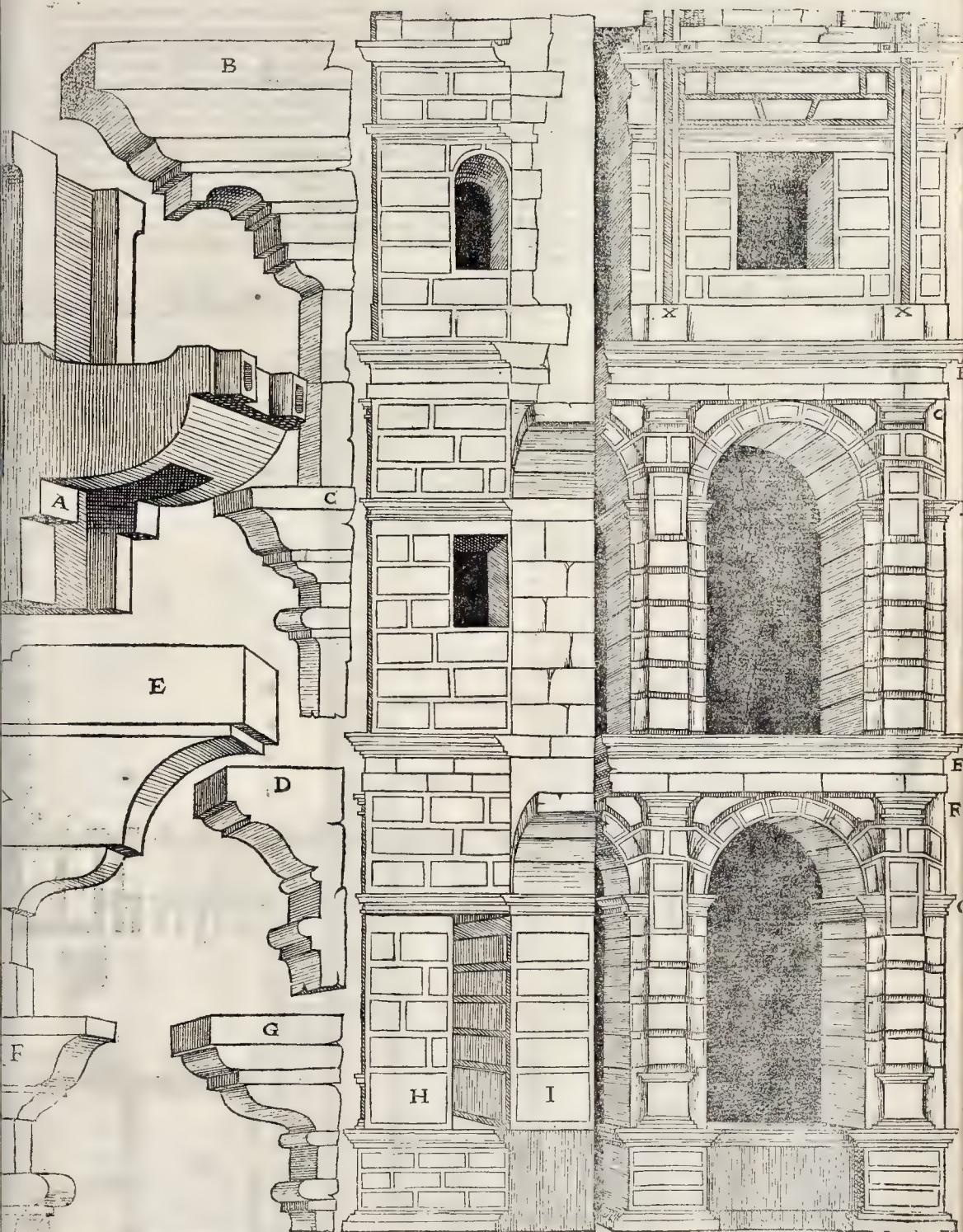




Of Antiquitie

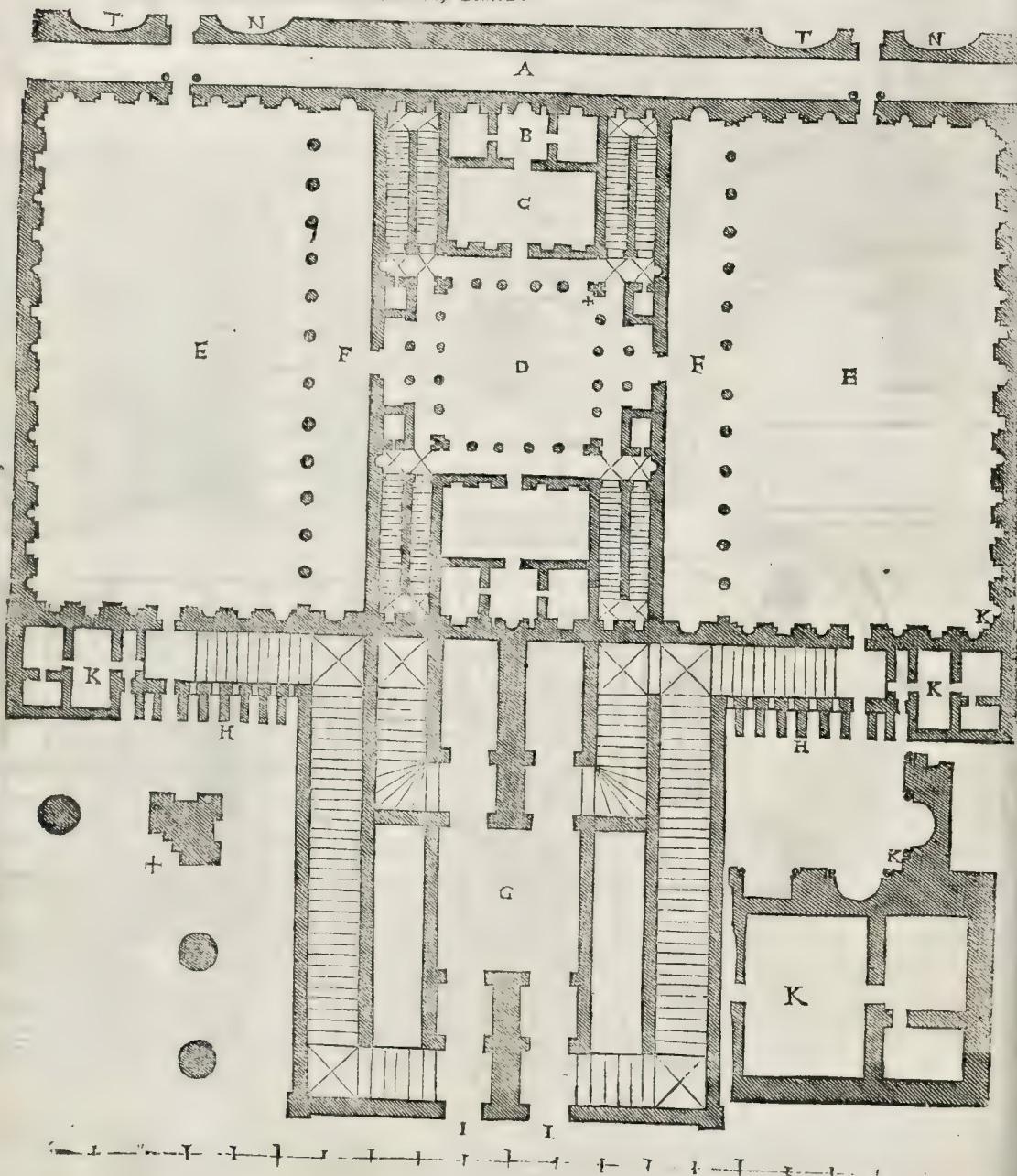
Touching the Orthographic, or the ground of the Amphitheater of Pola, I haue sufficiently spoken: but now I must shew the Orthographic of the part standing vp, beginning at the nether part: as touching the Basement, it hath no terminations of measures, (the cause wher is,) for that the Hill is not even: for in the Hill the Pedestall is not onely lost, but also the whole first order of the Arches, with all their Coornices vpon them, and the Hill is the hei h[er]t of the plaine of the second story; therefore I will set downe no height of the meafeure of the Valements: but will begin from thence vpwards. The height of the Pedestall under the Pillar, is 2. foot and an halfe: the height of the Pillar, or flat Column with the Capital, is about 16. foot: the height of the Arch, is 17 foot and an halfe: the Architrave is a foot and 9. ounces high: the height of the Frise, is 9. ounces: the height the Cornice, is one foot & 10. ounces: the height of the boord-ming or place brest-high (if there bee any other) above the Cornice, is as high as the Cornice: the height of the Pillar is 21. foot & 9. ounces, with the Capital: the height of the Arch, is 18. foot and one ounce: the thicknesse of the Arch, is 1. foot and 9. ounces: the Architrave, Frise and Cornice, are of the same height that the undermost is: the Basement marked X. is 4. foot and 4. ounces. From the Basement to under the Cornice, is 19. foot: the height of the Cornice is one foot and an halfe. And this is touching the Orthographic of the Amphitheater, the which Orthographic is on the next side, marked P, and for that (as in the Creare of the Orthographic I haue laid) the Amphitheater hath some Pilasters on foure sides, which were made for strengthening & counterforting of the walls: the which wall stood within, without any thing else; and therefore I mean to shew where it stood: the Figure marked Q. sheweth the sides of this counterfort: & that part marked H, representeth a pilaster: that part marked L, sheweth the Profill of the wall of the Amphitheater: betwene the Pilaster H, and the wall of Pilaster marked L, is a going through of three foot and an halfe wide: so that two men may goe throughe together. These counterforts haue their ground in every order of storie, whereon the people might stand; but there are no steps nor signes of steps, but were made of wood, as may be seene by some holes bi. to the windowes. And that the Coornices of this present Building may be the better understand, therefore I haue set them there besides in greater forme, that a man may know their members, by their Characters or Letters which they are marked withal. The manner of this Coynicement is much differente fro the Romane, as men may see: and I, for my part, wold not make such Coornices in my wozke; but with the Theater of this Towne, I wold serue my turne, because they are of a better manner of worke. I am of opinion that this was an other workeman, different from the other, and it may be that this workeman was a high Almaine, because the Coornices are made much after the Dutch manner.

The halfe common foot, wherewith the Amphitheater is measured.



Of Antiquitie

AT Mount Caballs within Rome, wher now the stone horses Paritiles and Phidia stand, is the ruines of a most costly Palace, whereof one part stood vpon the hill, but the part of the goings by was made right against the descending of the hill, as you may see in the Profill hereunder. The Ichnographicie of this building was measured with a common Ell, the third part whereof standeth herunder. And first in the Pictures or hollote places, marked T. and N. were found the figures of Tiberius and Nalus, which are now set in Beldnerie: the place marked A. is a strate or way of 10. Elles broade: the yart marked B. is 12. Elles fourre square: the part marked C. is 36. Elles in length, and 18. Elles broad: the place D. is 36. Elles fourre square: the walkes round about are 4. Elles broad: the place ouer-against C. B. is of the like measure. The bidenesse of the fourre page of Staires is 4. Elles each of them: the places E. are Courts, whereof each of them are 1 14. Elles leng, and in bredeh 62. Elles and a halfe. The Galleries F. are 13. Elles broad: the greatest Staires, to goe vp to the plaine of the Palace, are 11. Elles wide: that part by the Corners marked K. is 12. Elles and a halfe broad, and long 16. Elles and a halfe: the yarde H. are Counterfois to hold vp the Staires. The place G. is a Court, which gaue light to the place within: the two galleries marked I. were to goe vp the Staires, and the building began where the Staires stand. The great stately Frontispice in the middle of the building, was of such breadth, as the middlemost part held without the Courts or Galleries. The two Figures, K. and ♫. which stand without the building, the one sheweth the Corner K. in greater and perfer forme, and the other is a Corner of the Court D.



These 3. Figures are members of þ asoſaid Pallace :
the part vnderneath in small forme, ſayneth the

Profil of the first part of the Pallace,
that is, the ſtares whereby
men went vp to th^e
plaine of the Buil-

ding, because it

was upon the

hill: and they

were magnificent and

ſtately. That part

upon the hill,

where the

Columnne

F. is marked,

is the ſide of the

Solid building. This

great Pillar marked F.

is þ corner Pillar of the

frontispice, which is 4.

— square ; but all the rest

are round, for that round Pillars are not fit

for corners: this Pillar is thre Elles broad in

the lowe part, and above, it is 2. Elles and 2.

third parts: the height, with Base and Capital, is 39. Elles, and is ſlanted from the top to the bot-

tome. The height of the Architrauе, is two Elles and

an halfe: as alſo the Fræſe, which is finely cut, and the

height of the Cornice is thre Elles and an eight part, and

all proportioned according to the greatness. The Freſe

on the Sides was an hundred Elles long: the Cornielement

with the Frontispice, as much as thre Outiles containeth,

is of one piece of Marble; and the Frontispice roſe vp in

the middle one ſixt part.

X

E

X

The Hill.

Lights.

Lights.

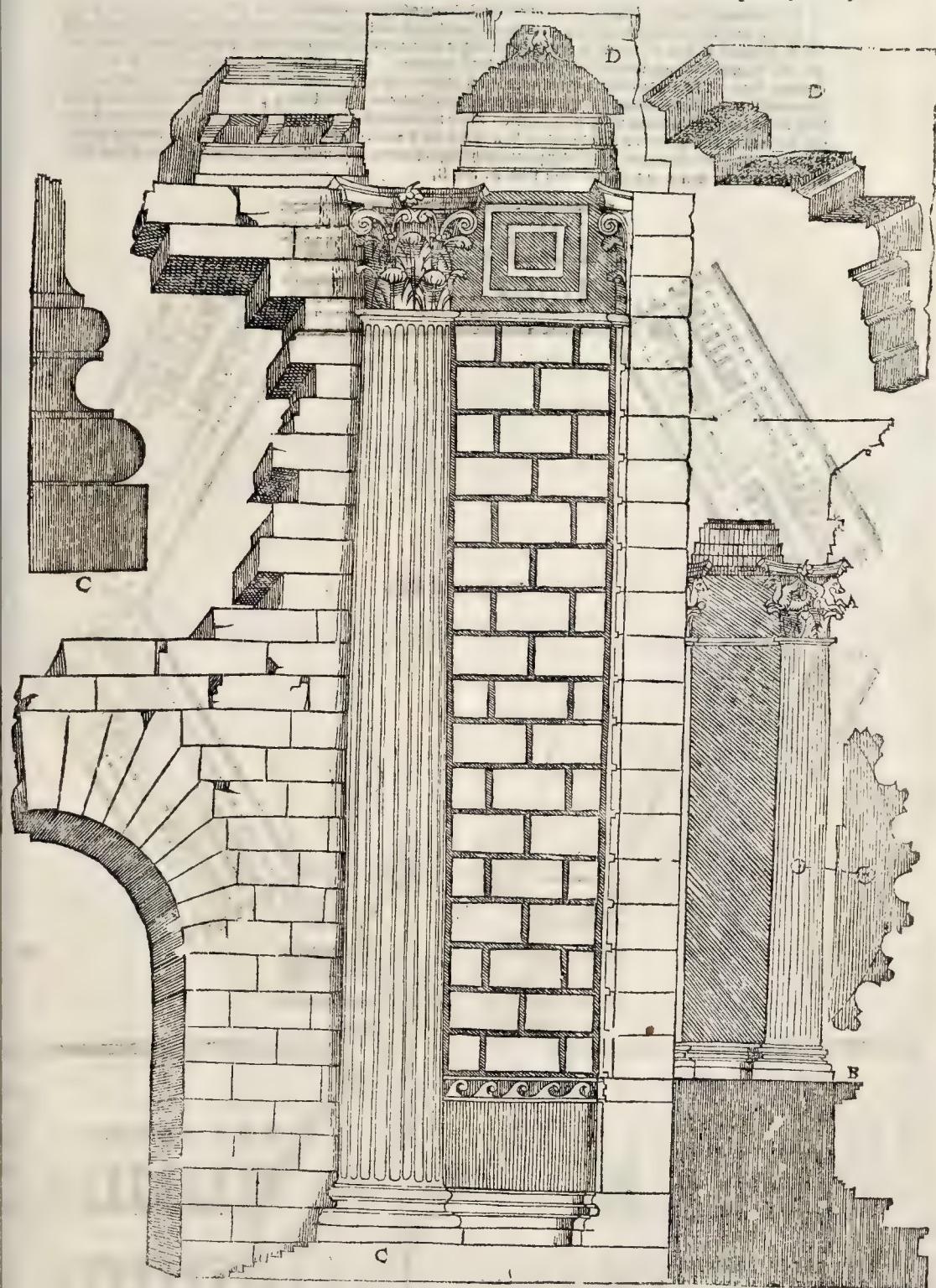
Of Antiquitie

Among the ruines of Rome, there are many things found out, the which a man cannot marke nor imagine what they haue bene: a man also seeth there many tures, whch are now cast downe and ouerthrown; whereby a man may conceave the high mindes of the Ancient Romanes: amongst which Antiquines, this hereafter following, is one, as you may perceave by that which yet standeth. This Building is called the Basilica del foro transitorio; and a man may imagyn the greatness thereof by the height of this Pillar, alhough you see not the ending thereof tywards; for the uppermost Cōnīce is not there in the woyke, neithēr is there any pieces thereof among the ruines to be found, whereby a man shoulde conceave what stood aboue such a Building. This ruine was measured with a common oʒ morerme Ell, which is deuided into 60. minutes: the halle wherof standeth betweene the Dbellies: this Columnne stood 7. degrees elevated from the earth, of indifferent height: the thicknesse of the Columnne marked C. is 3. Elles in Diameter: beneath at the Base and in the uppermost part, vnder the Capitall, the Diameter is 2. Elles and 40. minutes: the height of the trunke oʒ bare Columnns, without Base or Capital, is 24. Elles and 55. minutes: the hight of the Base beloue, is one Ell and an halle: the height of the Capitall, is 3. Elles and 26. minutes: the height of the Architrave, is two Elles, and 23. minutes: the Cōnīce betweene the Columnne and the counter-pillar, whch Cōnīce is marked D. is 1. Ell and 48. minutes: the Cōnīce aboue (as I haue sayd) is not found there: the counter-columnne is flat, and is of the same proportion like the round Columnne, and lessened also aboue, as the round dooth. The Capitall is formed like the Capitals of the Pantheon of the Rotund: the Base marked C. is placed there besides in better forme, and is propotioned in measure like the greater: likewise, there also you sa the Cōnīce D. in greater forme. I haue set downe the measure of the greatest Columnne C. now will I speake of the lesser, marked B. whch Columnne vnder it, hath a very fayre Valement: the height wherof, is 6. Elles: the thickenesse of the ladt Columnne in Diameter beneath, is one Ell and a third part; and it is lessened aboue accordingly, as the greatest is: the height thereof with the Base & Capital is 13. Elles and 2. 1/3 parts: the height of the Base, is halfe the thicknesse of the Columnne beneath, and is fashioned like the greater: the height of the Capital is one Ell & an halfe: whch Capital is very well made, and the forme thereof in great, is seen in my other 4. Booke, in the beginning of h Composta. This Columnne is flutes, as the Figure thereof sheweth, and hath also a flat Columnne of the same forme: the Architrave, Frēsē and Cōnīce aboue this Columnne, are about 4. Elles: whch Cōnīce hath the Putiles without Dentiles, and is very like the woyke of the Pantheon; and by as much as I could perceave, this lesse Columnne served for an ornament of a Gate oʒ Dore of the ladt Basilica.

The thrid part of the common Ell, wherewith this is measured.

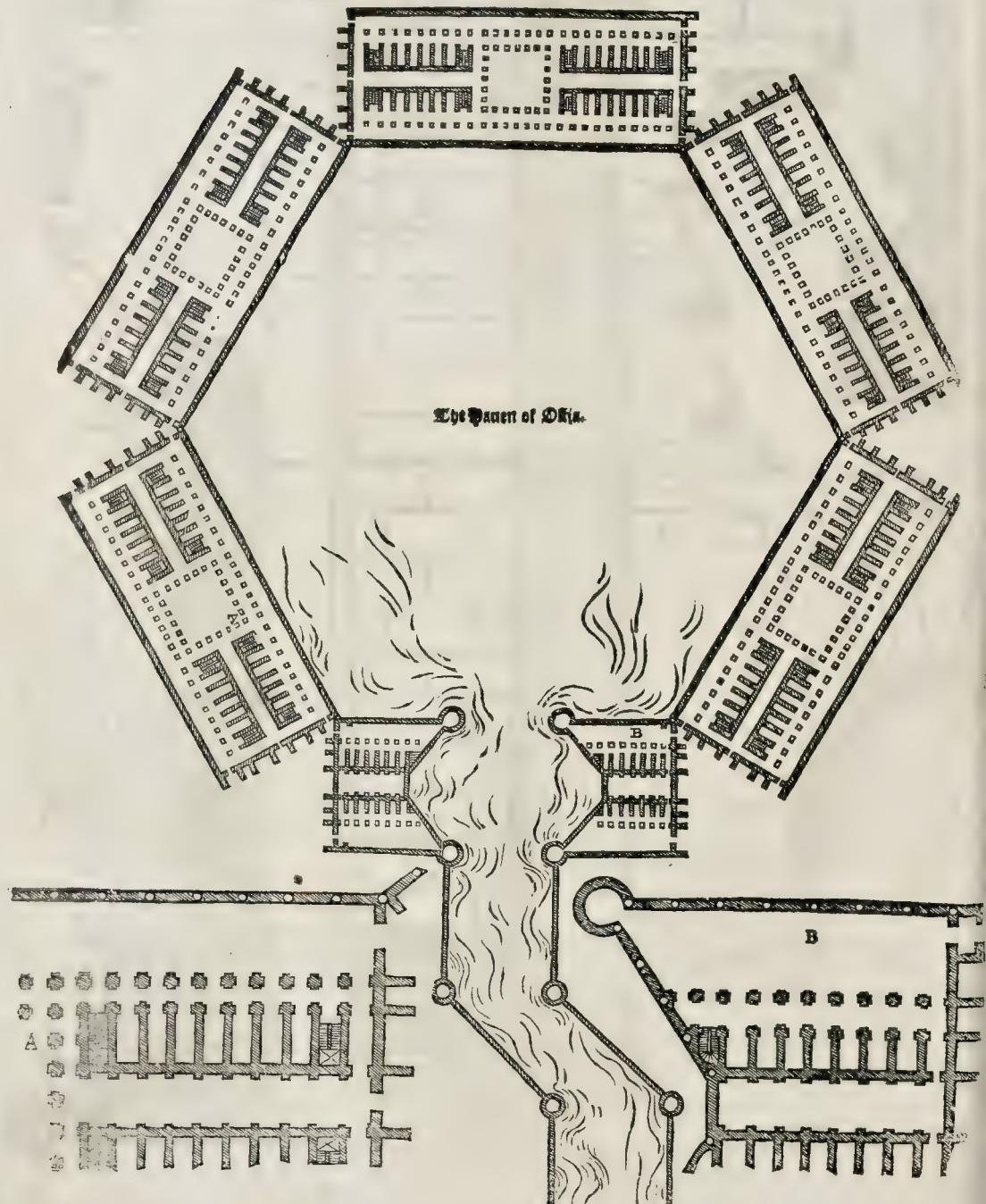
The third Booke.

The fourth Chapter. Fol. 39.



Of Antiquitie

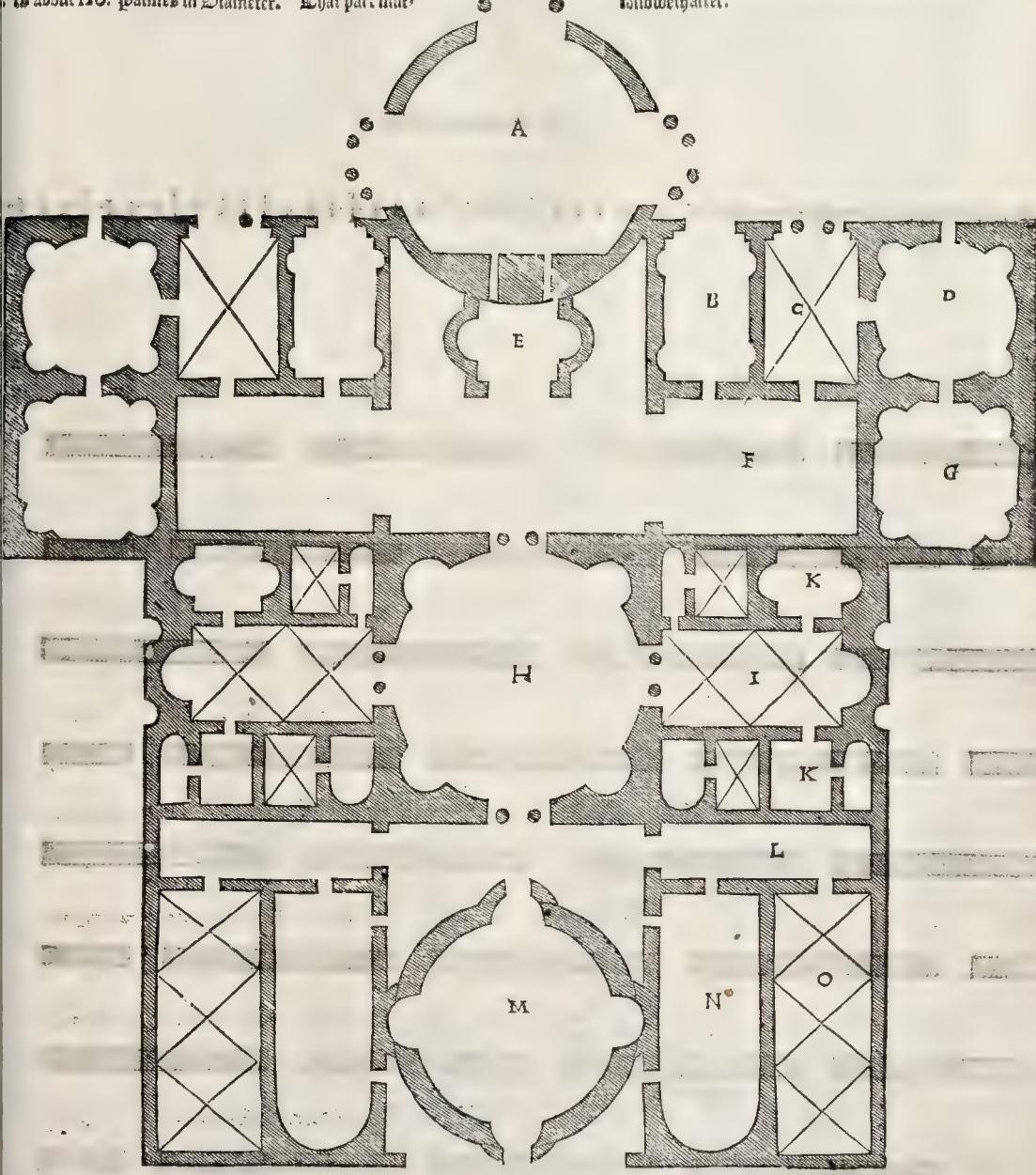
The Romances (because of their great proud minde) alwaies sought to build things of great maiestie, whiche might shew their great power both by Water and Land: and to that end they made the wonderfull Haunce of Ostia, for the easse of the Cittie of Rome: which, in truthe, (in regard of the commoditie and greatness of the Building thereof, and specially the great strength thereof,) may well bee called wonderfull. It is of forme Hexagonick, that is, 6 cornered: and each Facie is 116. roodes long, and each rood is 10. Palmes: by these principall measures, you may understand the greatness thereof, every Face had a large walking place, with Galleries round about, & 4. Appertments also, compased with Galleries, and a walking place in the middle. Along the water side there were franchees of Columns orderly placed, whereon to the ships were fastened; and at the mouth of the Haven, there were towres to defend it from the enemy in time of ned. And so that you can hardly perceave the Appertments in so small a forme, therefore I haue placed them beneath in greater forme, and marked them with A. and B.



The third Booke.

He Thermes of Titus are lesse then the other, and therefore by the people they were called Thermi minori: nevertheless, (after my opinion) they are well made: the Zchnographicie of these Thermes is measured with the ancient Palme. First, the Diameter of the round soyme marked A. is about 150. Palmes: the part B. is in length 80. Palmes, and in breadth 51. Palmes; the part C. is 80. Palmes in length, and in breadth 60. Palmes. The forme D. is about 100. Palmes in Diameter: and the portall E. is 50. Palmes in Diameter: the part F. is 120. Palmes long, and 70. broad: the eghth rankled part marked G. is about 100. Palmes: the round part H. 50. Palmes in Diameter. The part I. is 100. Palmes, and is almost two fourre squares; the two parts, each marked with K. is 30. Palmes on eghther side. The part L. is 125. Palmes, in length, the breadth 30. Palmes. The roundnesse marked M. is about 120. Palmes in Diameter. That part mar-

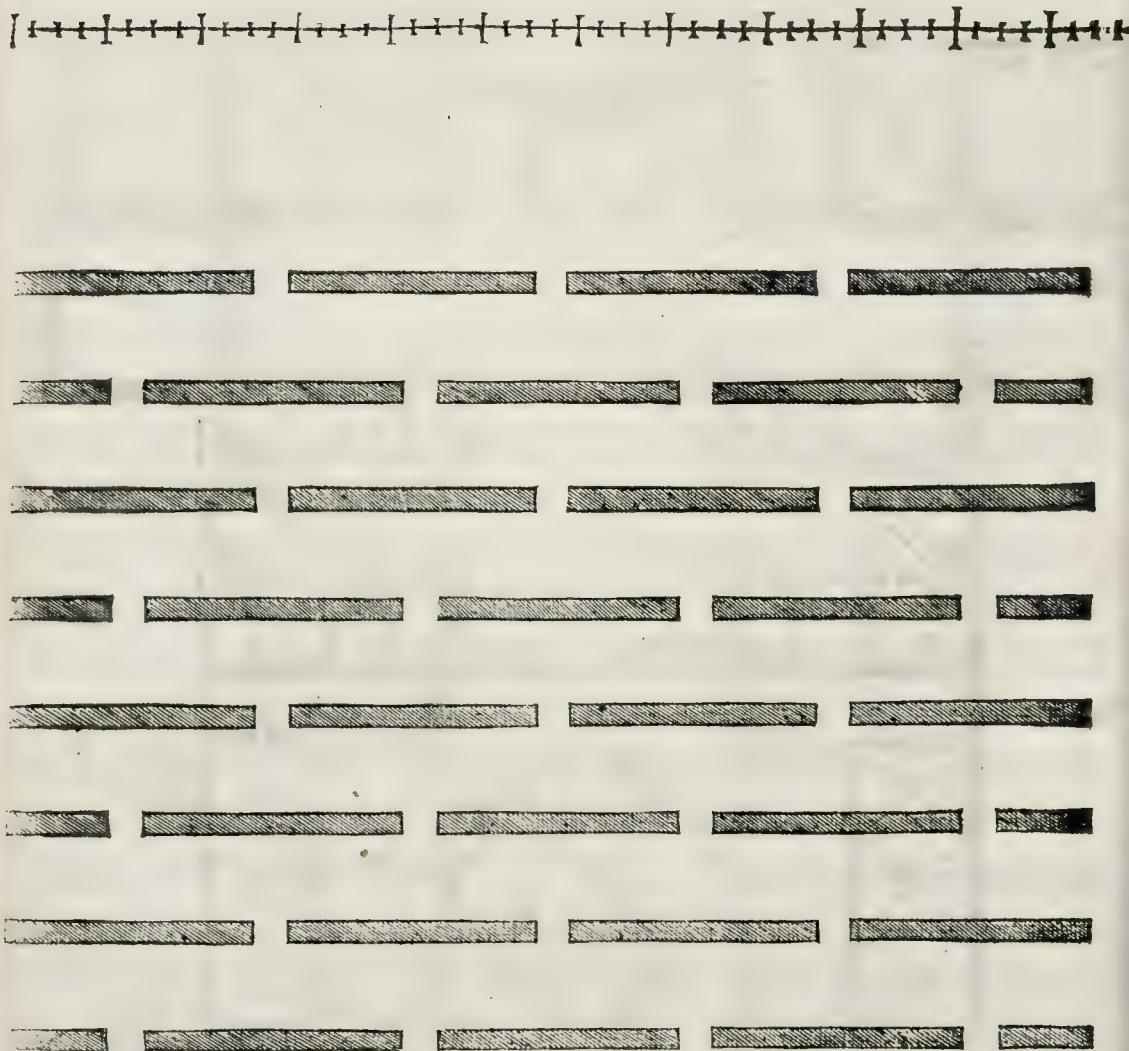
The fourth Chapter, Fol. 46.



Of Antiquitie

The preseruing, or the place where the water of the Thermes of Tius, the sonne of Vespianus was kept, is wonderfully made, and very Artificiall, and that is, for that the Arches of these preseruatiues are placed in such good order, that a man, standing in the going through of the one sterte them all overthwards: and this is the place which the people commonly call, The severall Valles; and it was for this cause, because the spaces are seuen in number: and in them you see overthwarks, backwards and sozwards, alwayes 7. in number: the thicknesse of the walls, is fourte foot and an halfe: the widenesse of the Arches is sixe foot: from one Arch to the other, are 27. foot: the widenesse from one wall to the other, is 15. fote; and they are round roosed, of an indifferent height. The walles and rooses are playstred with most hard plastrer.

The old Romane Palme.

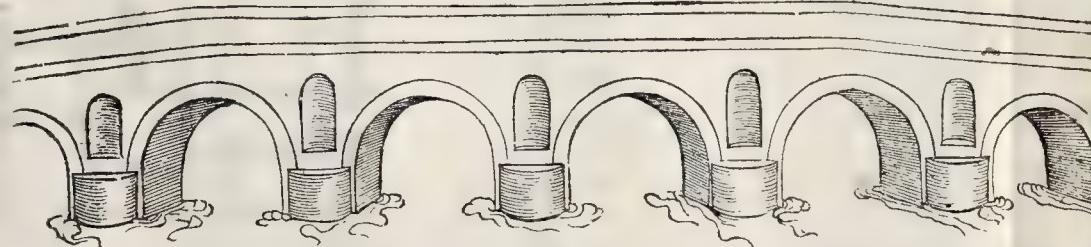
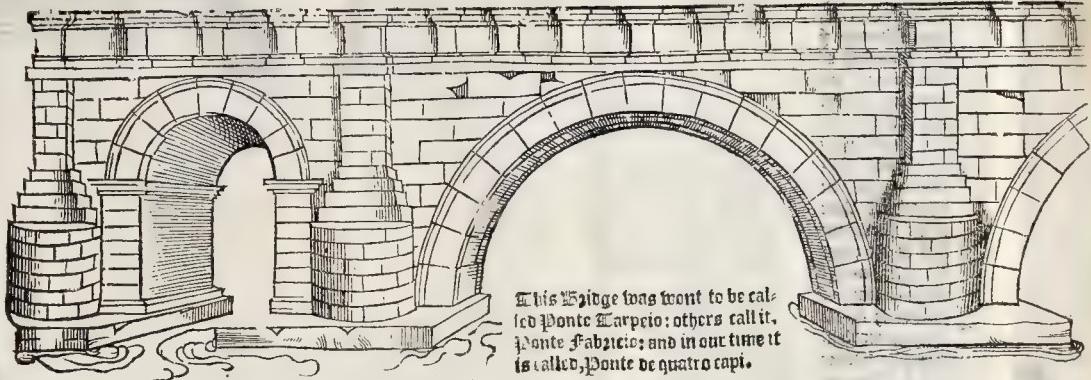


The third Booke.

The fourth Chapter Fol. 41.

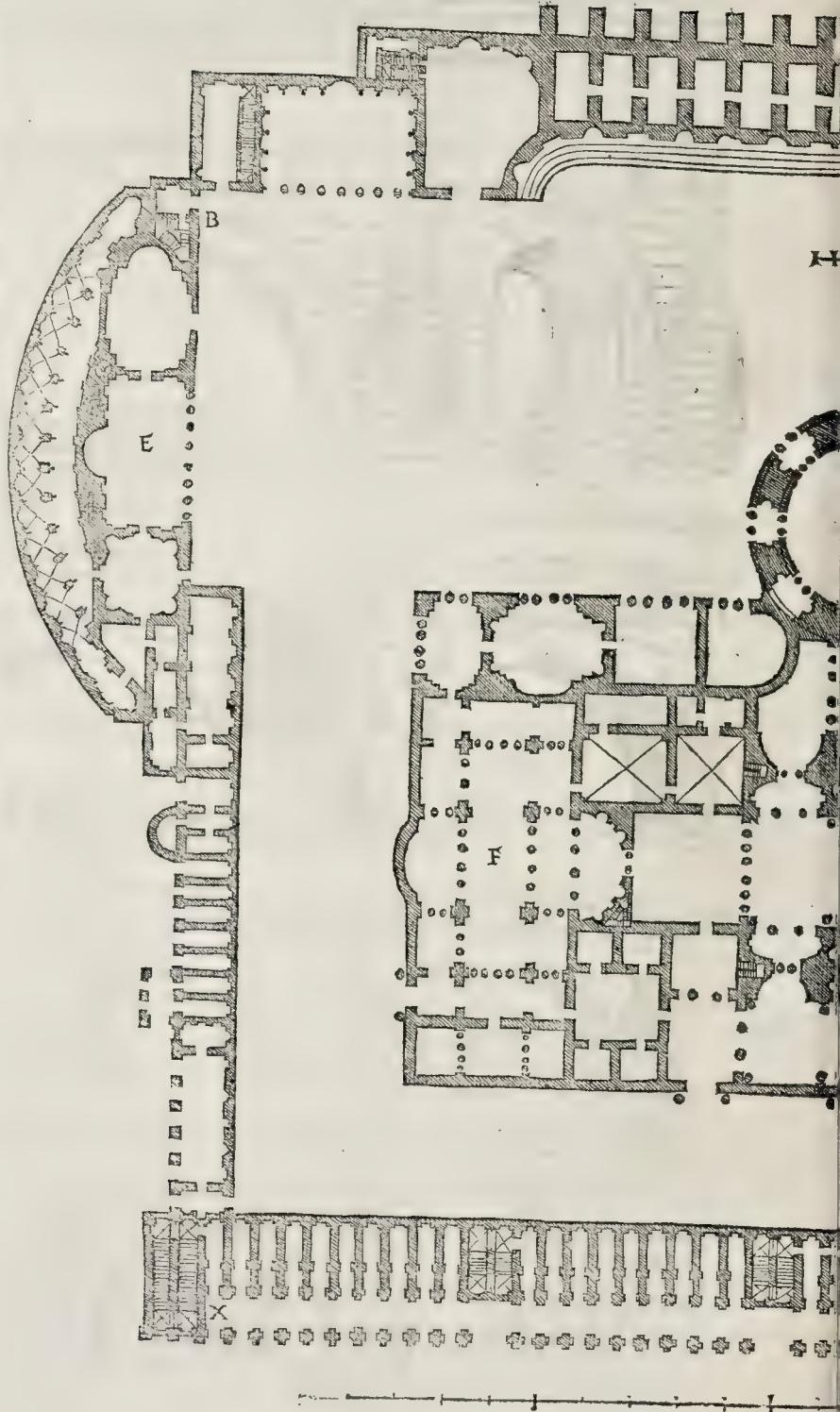
In Rome and elsewhere there are many Bridges made by the Romanes, but I will here shew the invention of fourre
elye, that you may see their manner of making of Bridges.

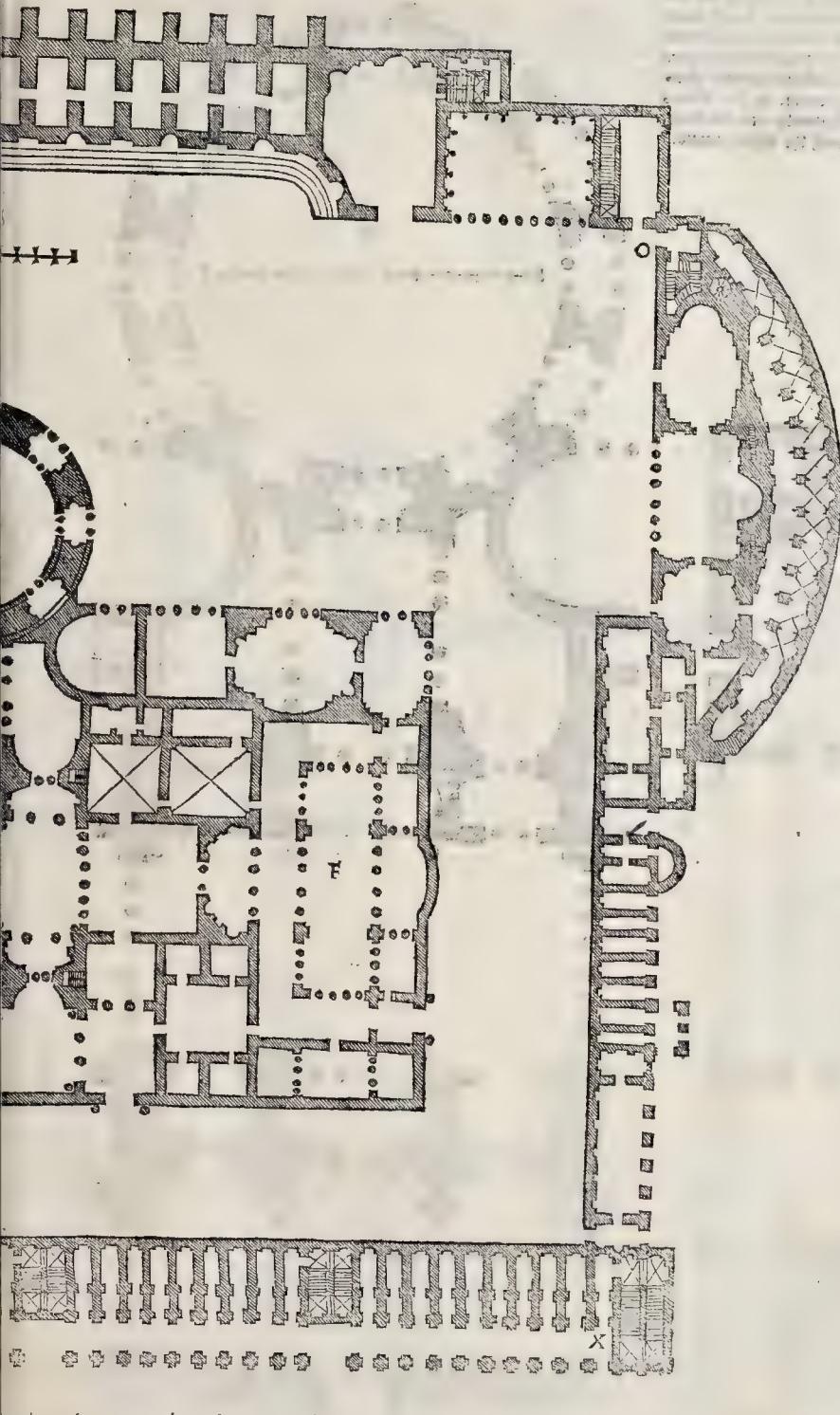
This Bridge is called Ponte S. Angelos, because it standeth bypon Tiber, by the Cowne of Ingheleboch: by the
ancient Romanes, it was called Ponte Elio, of Elio Adianus.



Of Antiquitie

Among other Thermes which are in Rome, I finde this of Antoniano to bee better to bee noted then the rest; and although the Thermes of Dioclesian are greater, yet in this I finde much fayrer correspondencie and knitting together in every part, then in the others: soz that in the place C they might make all kind of playes or sports without any hinderance. And soz that the Thermes were specially made for men to bathe in, as they were bled for divers sports to be made in them, so was the prefermentation of the water made behind the building, marked A. where, by meane of the Pipes, they were alwayes filled to serue for such usses.

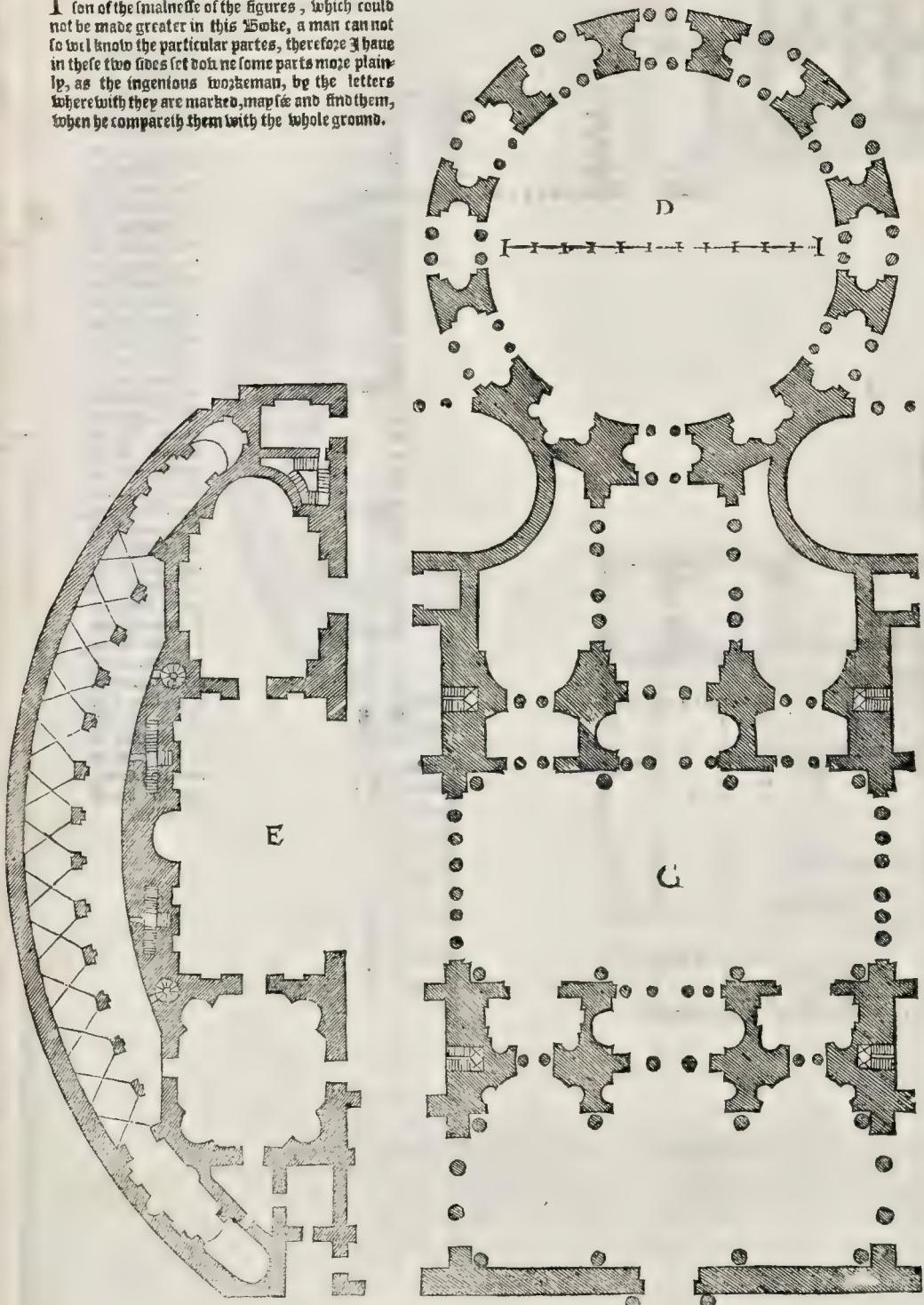




This ground is measured with the common Ell, the third part whereof is hereunder set downe by the side of the Building. The line in the middle of the place, is 100. Ells, by the which you shall almost finde all the measures, whereof, for breuitie, I will not speake directly, but only of the principal things. First, one of the places for the keeping of the water, is thirtie Ells long: and 16. Ells broad. The part X. is 81. Ells long, and the breadth 44. Ells: the round Building D. is in Diameter 86. Ells. The place marked B.C. is 700. Ells long. The part in the middle, marked G. is in length about 105. Ells, and in breadth 60. Ells.

Of Antiquitie

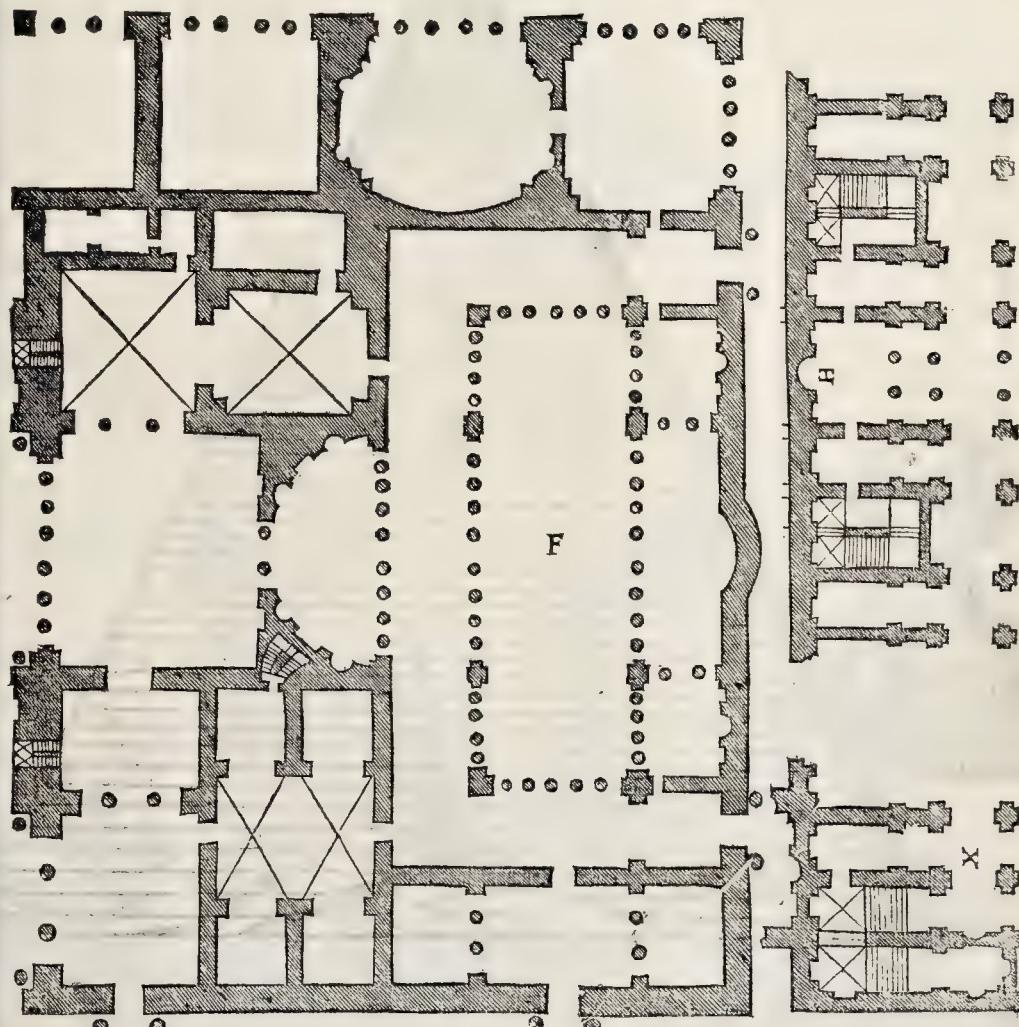
For that in the ground before set downe, by reason of the smalnesse of the figures, which could not be made greater in this Booke, a man can not so wel know the particular partes, therefore I haue in these two sides set downe some parts more plainly, as the ingenious woxeman, by the letters wherewith they are marked, may sicke and finde them, when he compareth them with the whole ground.



The third Booke.

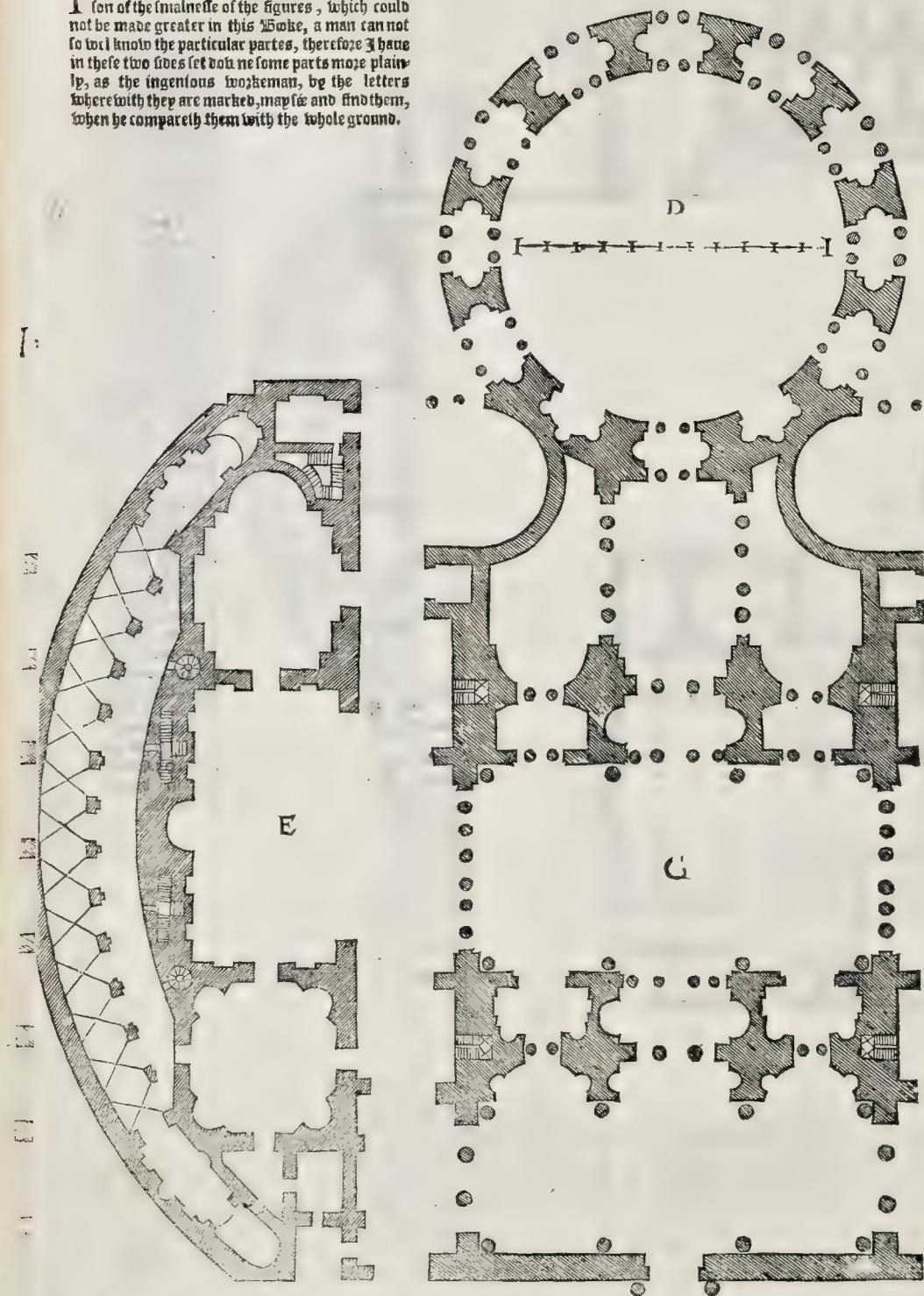
The fourth Chapter. Fol. 43

Although these Figures stand thus withoutt order , and in many pieces , yet the wisse workeman shall know, that they are members of the Thermes afore shewed, beholding the letters which stand in them (which comparing with the others) he shall find what parts they are. Also, he must know, that the parts H. and X. belong not to the part F. for the Figures hereunder are thre several parts; although, for necessarie sake, they are set one by another. I have also set downe the particular measures: for the workeman shal better helpe hymselfe with the invention, then with the measure.



Of Antiquitie

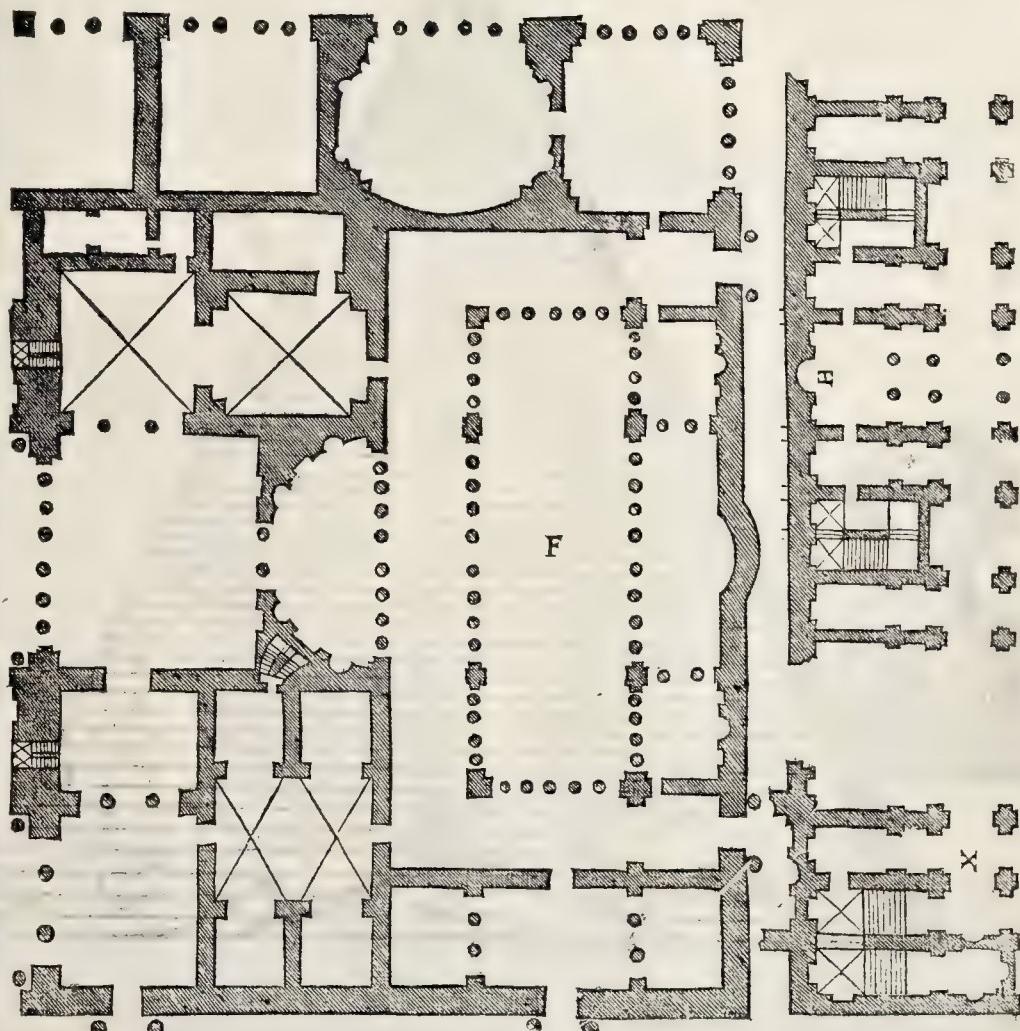
For that in the ground before set downe, by reason of the smalnesse of the figures, which could not be made greater in this Booke, a man can not so wel know the particular partes, therefore I have in these two sides set downe some parts more plainly, as the ingenious workeman, by the letters wherewith they are marked, may see and finde them, when he compareth them with the whole ground.



The third Booke.

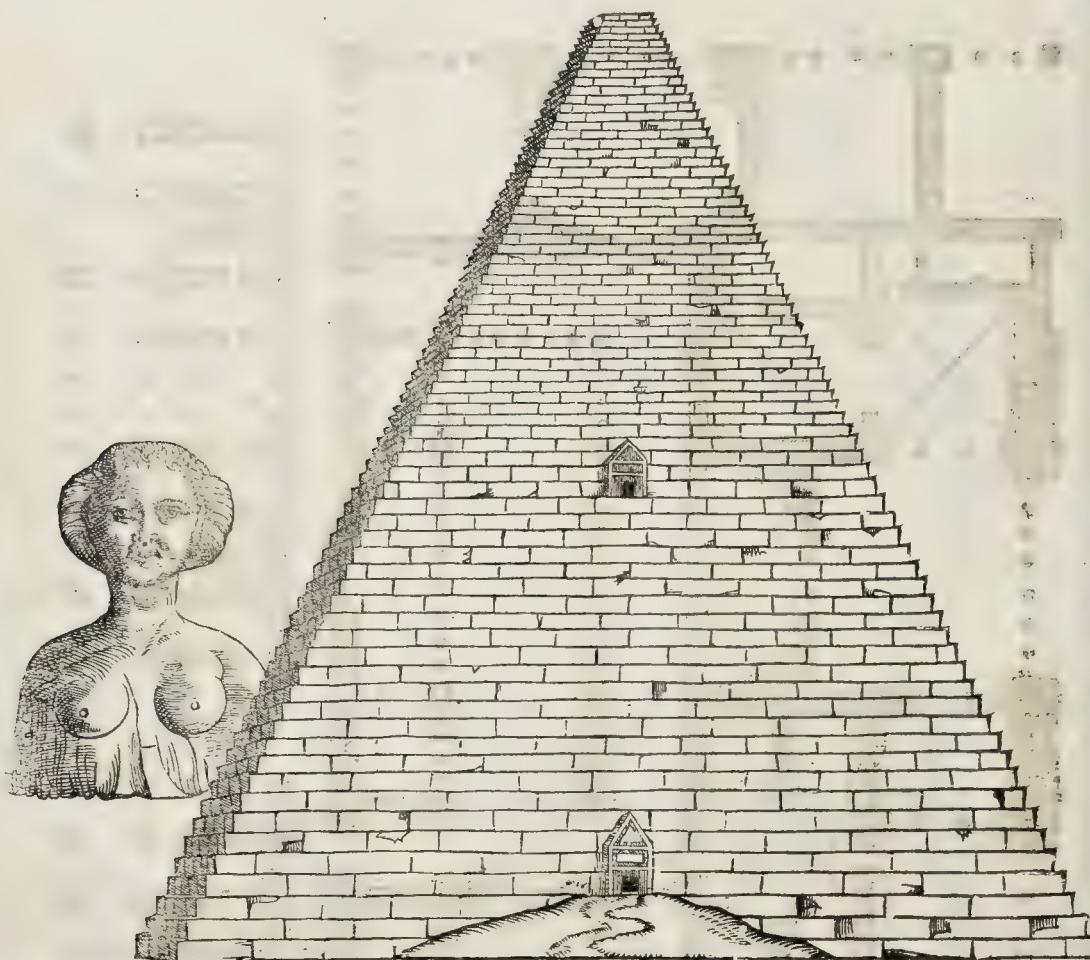
The fourth Chapter. Fol. 43

Although these Figures stand thus withoutt order, and in many pieces; yet the wisse workeman shall know, that they are members of the Thernes afore shewed, beholding the letters which stand in them (which comparing with the others) he shall find what parts they are. Also, he must know, that the parts H. and X. belong not to the part F. for the Figures hereunder are three severall parts; although, for necessarie sake, they are set one by another. I have also set downe the particular measures: for the workeman shal better helpe himselfe with the inuention, then with the measure.



Of Antiquitie

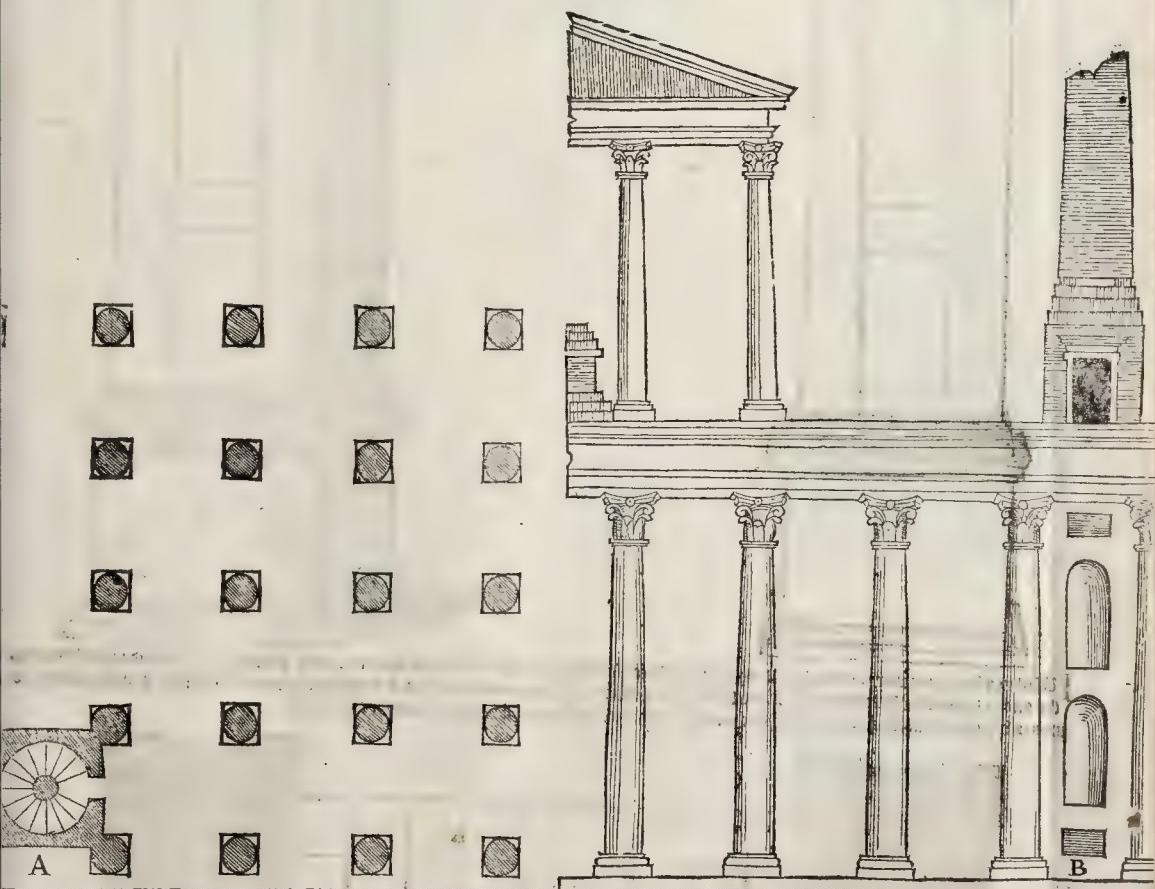
A bout seven miles from Alexire there is a Piramides, whereof I will shew the forme, and also set downe the measure, as I had it from a Gentleman of Venice, who measured the same himselfe, and was both vpon it, and within it. This Piramides was measured by Paces, and every Pace is more then thre Palmes: the Vale, on every side, is 270. Paces, and is right soure square: it is all of hard stone, and you may clime vpon it without, (but not easily) vnto the top: for every Pace is thre Palmes and a halfe high: but there are not so many Plaines, that a man may easily set his fot vpon them: the number of the Paces or steps, from the Vale to the top, or the highest part, is 210. and they are all of one heightheight; so that the height of the whole Piramides is as much as the Vale. Many beleue that this Piramides was a Sepulchre: for that within it, there is a place in the middle, whereon lyeth a great stone: thereupon men presume, that some great person had there been buried: but going in, vpon the left hand, you finde a going vp of stone, which turnes about the Piramides within, through the which you goe vp the Stacion, in the top within. About the middle of this Piramides there is another going in, but it is fast shut: on the top of this Piramides, there is a faire flat o; playn, about 8. Paces broad on every side, whereby workemen know, that it was the same playne that was made at the finishing of the Piramides. Not farre from thence, there is a head of hard stone, with part of the brest all of one stome; the face whereof is 10. Paces long: and in this Figure there are some Egyptian letters: of this Piramides and head, Peter Martin witteth, and hath also seene and measured them, which differ not much.



The third Booke.

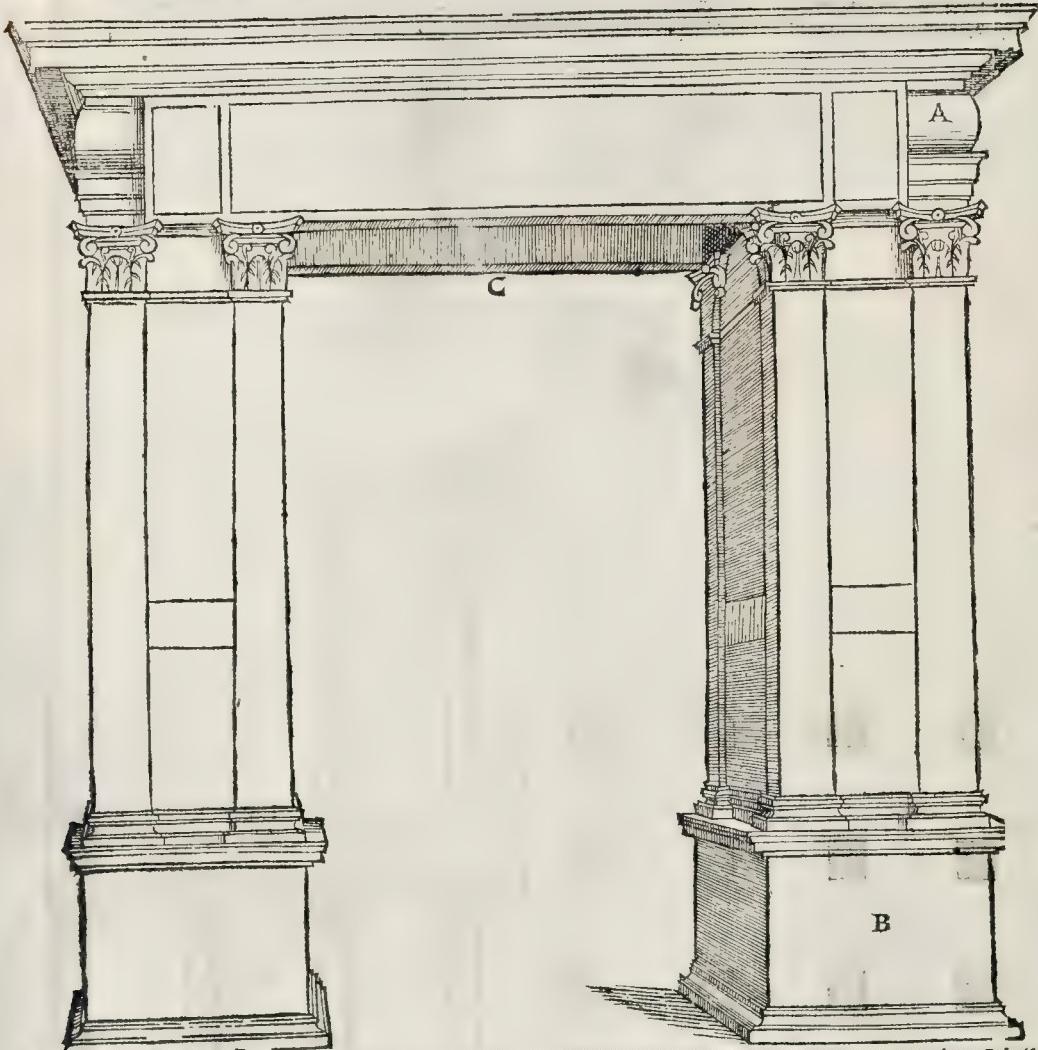
The fourth Chapter. Fol. 44

Although the Greekes were the principall founders and inuictors of good Architecture (as our Master Vitruvius, and many other Authors witness) notwithstanding, by reason of their great warres, and their Land so often ouerrun and spoyle by the enemis, a man can hardly finde any good worke standing whole in all Grecia: but as some men haue told me, there are yet the ruines of a Building, which, as men conceare, was of one hundred Columnes; whereof no man can by easynesse know the height. But (with our Authors licence) for that he makes this by report, and hath no measure thereof, I haue onely set the fourth part of the ground by the halfe of the Building (which he hath thereto pleased) whereby the workeman may conceare the whole ground, and the whole Figure thereto.

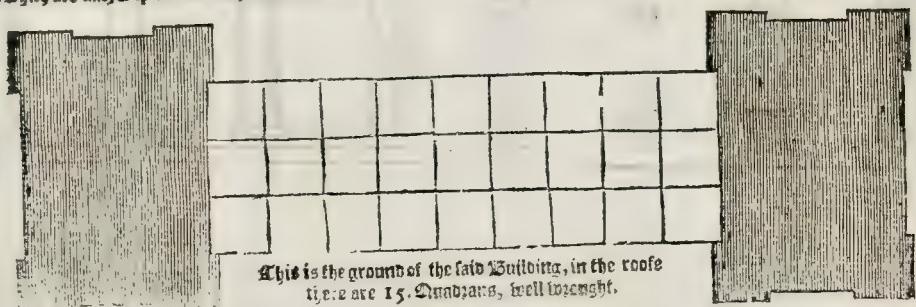


Of Antiquitie.

B
y H. George Belabro, you may se this building herunder, which was made by the Bankiers & Drapellers, in the time of Lucius Septimus Severus, and Marcus Aurius Antonius: which Building is of Composita wozke, well let work on every side with graining. Let no man wonder that the Frise & the Architrave are coured with this table, for that there being much writing to bee set into it, the Frise was not great enough to containe so many letters: therefore the workeman made it so, and bhafe not the oder or Architecturre at all, leauing the true proportion thereto in the corners.



I will not set the measure of this Building at large, because it was lost after it was measured: but as I remember, the widenesse betweene the one end the other Pittelle was 12. 00 foote. The height of that widenesse was 20. foote: the thickenes of the Pilasters, with all the Columns whiche are flat, is 4. foote and an halfe; and so much the Architrave, Frise and Cognice containeth.

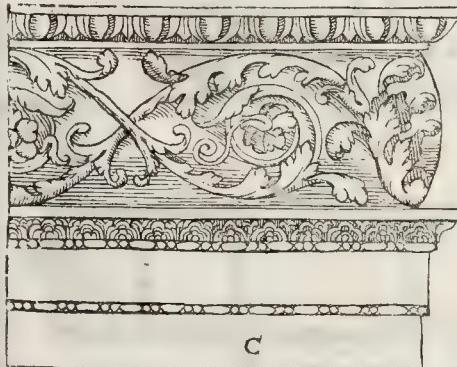


This is the ground of the said Building, in the roofer: there are 15. Quadrans, well wrought.

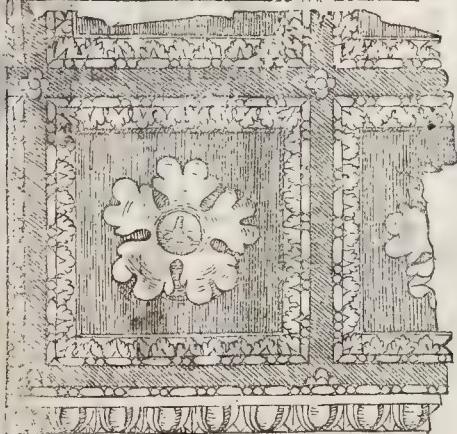
The third Booke.

The works heretinder are the ornaments of the soz esaid building, the which, in trueth, is as branly set forth, as any other wozke in Monte, for there is no space without grauing; and also well made: all things very corespondent, onely the uppermost Cymacie; the which, in regard of the richnesse of the grauing, is much confaud: it is also vicious from the Echme down-wards, for 2. canies; the one is, that betwene the Echme with þ Duale, and the Duale, & the Dentiles, there is no parting of liss or cymacie: for it is very necessary to deuide the one from the other, i especially when they are all cut. The other is of greater importance, & under the Dentiles there are two workes of one fashon & cutting, which I shold not have made so: but I say exprely it is not to be done, nor such things men ought not to doe.

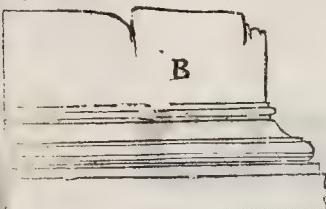
(deth rest.
The innermost part whereupon the rose or Seling



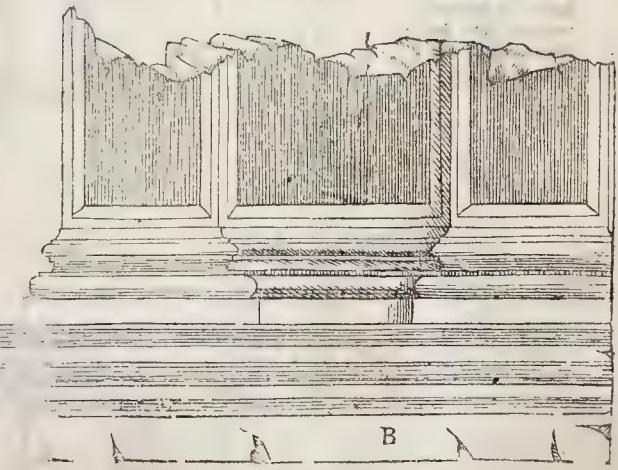
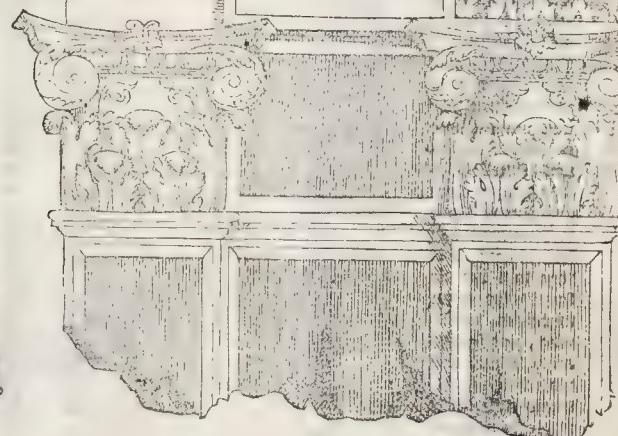
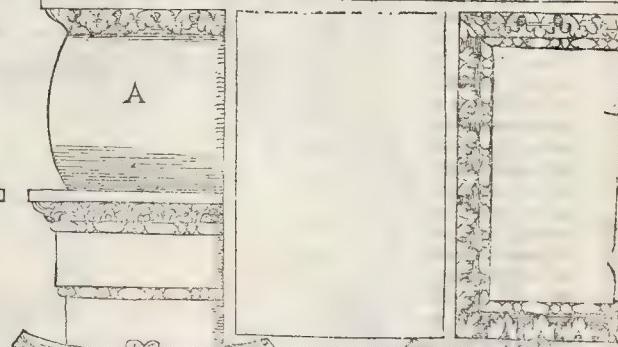
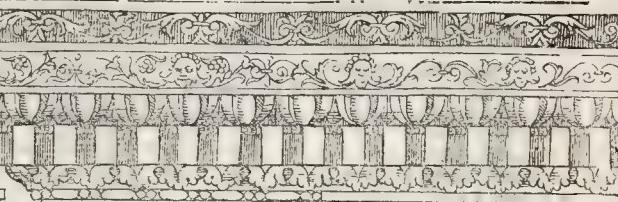
The bottome of the Architrave.



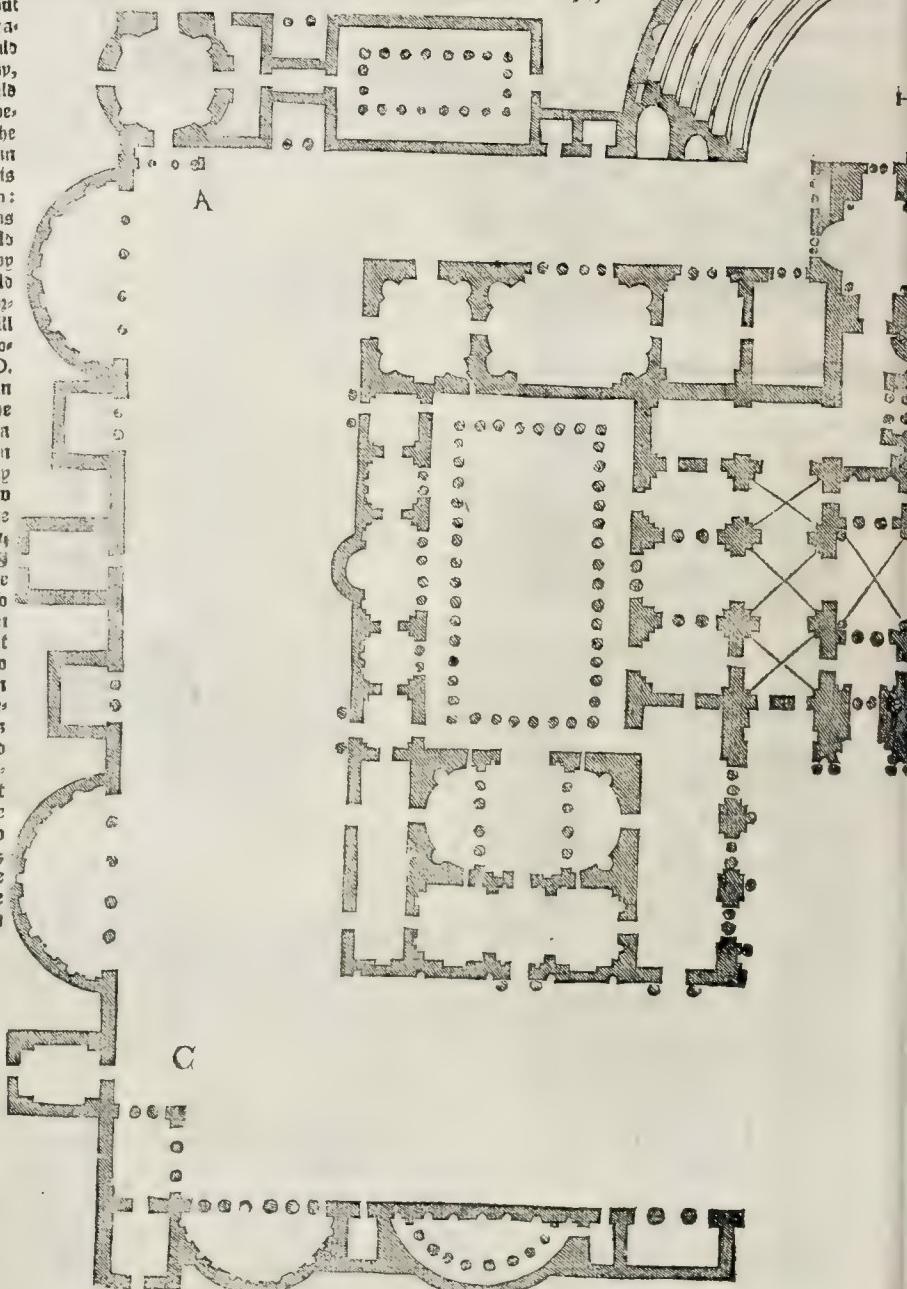
In the furthest part of the rose, are 27. Quarzar's.



The fourth Chapter, Fol. 45

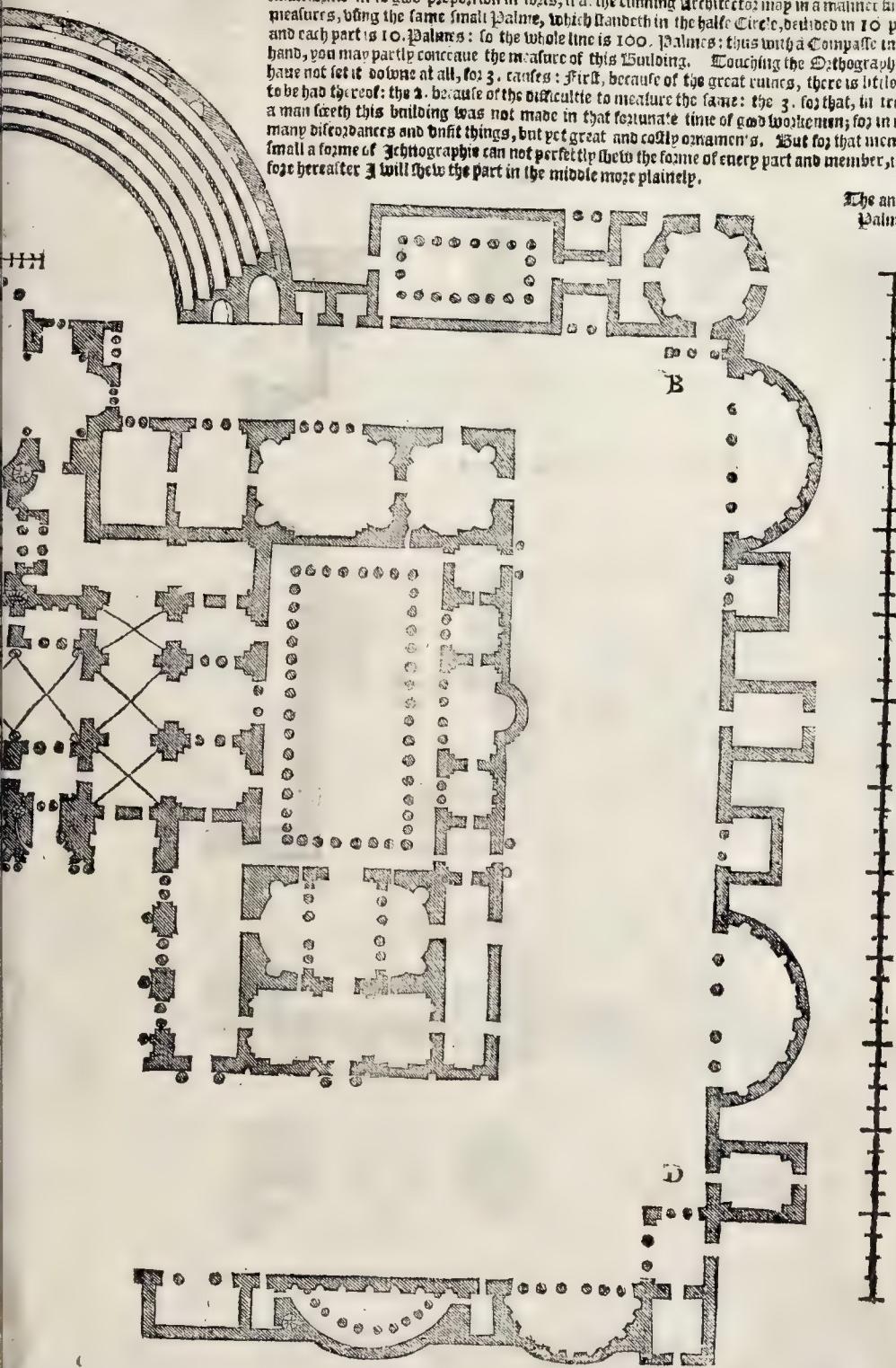


THE Thermes of Dickestan, in knelth, is a most rich Building, by that which is seen in the ruines, which are yet standing above ground: besides, the Appertements of divers formes, with rich ornaments, and the great number of pillars that were there, are witnessnes of their magnificence: by the deuiding this ground, and by the divers formes therin, the ingenios workmen may bee well helpe. But a man can not denie, but that there is much discordance in it, which in our time would not bee borne withall: this I speake, not so exact such pullant Emperours, no so many god workmen as were in those dayes: although they as then were not so skilfull, as a great number were at other tyme: but I say this only, for the god of them that will not thinke leane to read this my writing. It is true, that the fayrest part of a Building is the correspondence thereof, and the appendances of the same, not troubled with things which trouble mens sight: wherefore I say, if the way A. B. were like the way C. D. then the whole Building would stand better behinde, in such sort, that all the wayes would be free, and not cumbered with any thing. Also the part of the Building in the middle marked A, which standeth without the wall to the Theater ward, would not hinder the way, but there would rest the space betwene it and the Theater, which in other Theaters is called Prosenium: and by this means al the waies would be wide; whereby the building would be much more correspondent. I will not speake of the other A.C. & B.D. which disagree in forme: but in the parts without, a discret workman of himselfe may well perceave, how much discordance is found therin, notwithstanding (as I saye before) there are so many, and so experiments in the divisions, that they will bee no small helpe to an ingenios workman, and such as are upholders and warrantes of Antiquities, hall, let please them, excuse mee, for being too plane with them; for I refer my selfe alwayes to the judgement of the learned.



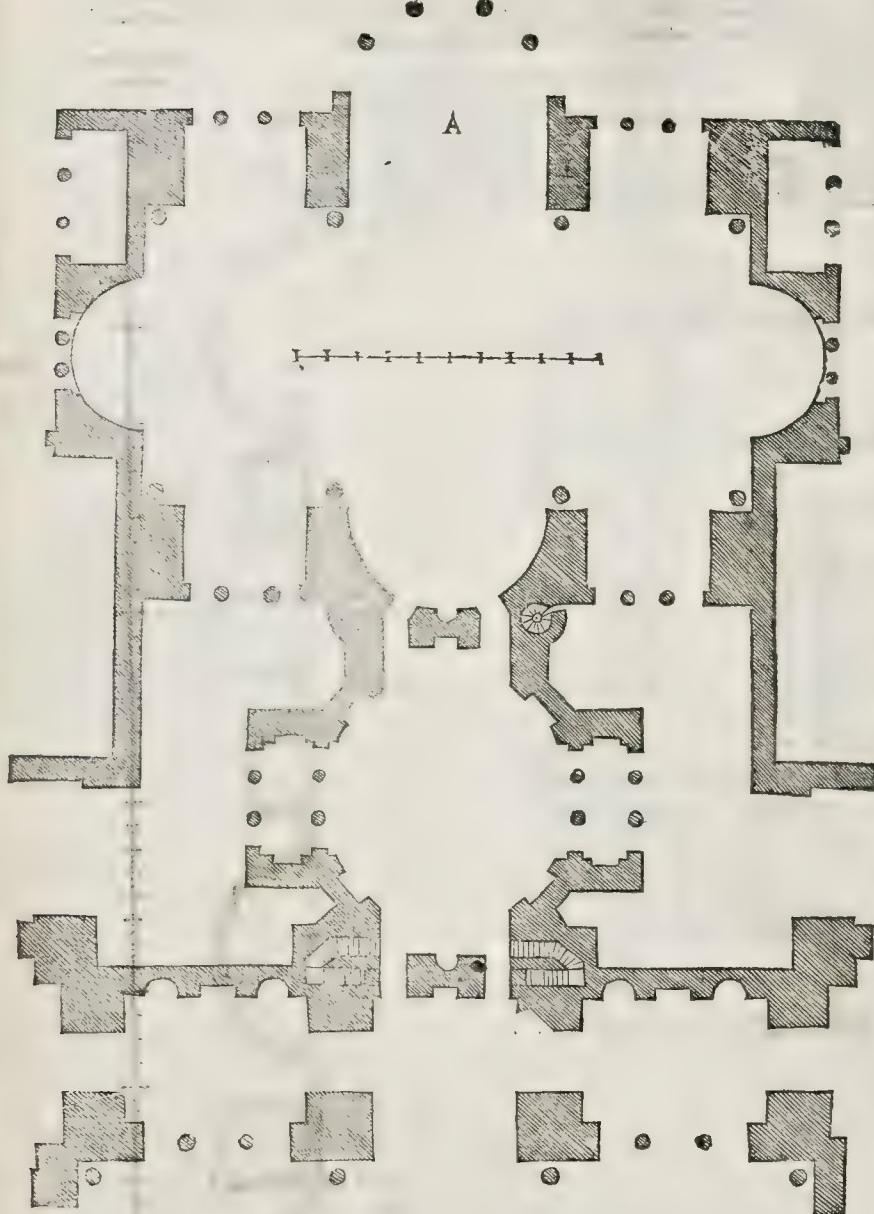
This Ichnotropicie is measured by the ancient Palme; so that in this ground I have bente
more curios of the invention, then of any other thing, therefore I set not downe the particular
measures, which, in truth, would be ouerlong to reteache: but I haue with great diligence set this
small forme in so good proportion in sorts, that the cunning Architectour may in a manner finde the
measures, vsing the same small Palme, which standeth in the halfe Circle, divided in 10 parts,
and each part is 10. Palmes: so the whole line is 100. Palmes: thus with a Compasse in your
hand, you may partly conceaue the measure of this Building. Touching the Orthographicie, I
have not set it downe at all, for 3. causes: First, because of the great ruines, there is little sight
to be had therof: the 2. because of the difficultie to measure the same: the 3. so that, in truthe,
a man seeth this building was not made in that fortunate time of godly workemen; for in it are
many discordances and unfit things, but yet great and costly ornamens. But so that men in so
small a forme of Ichnotropicie can not perfectly shew the forme of every part and member, there-
fore hereafter I will shew the part in the middle more platiuely.

The ancient
Palme.



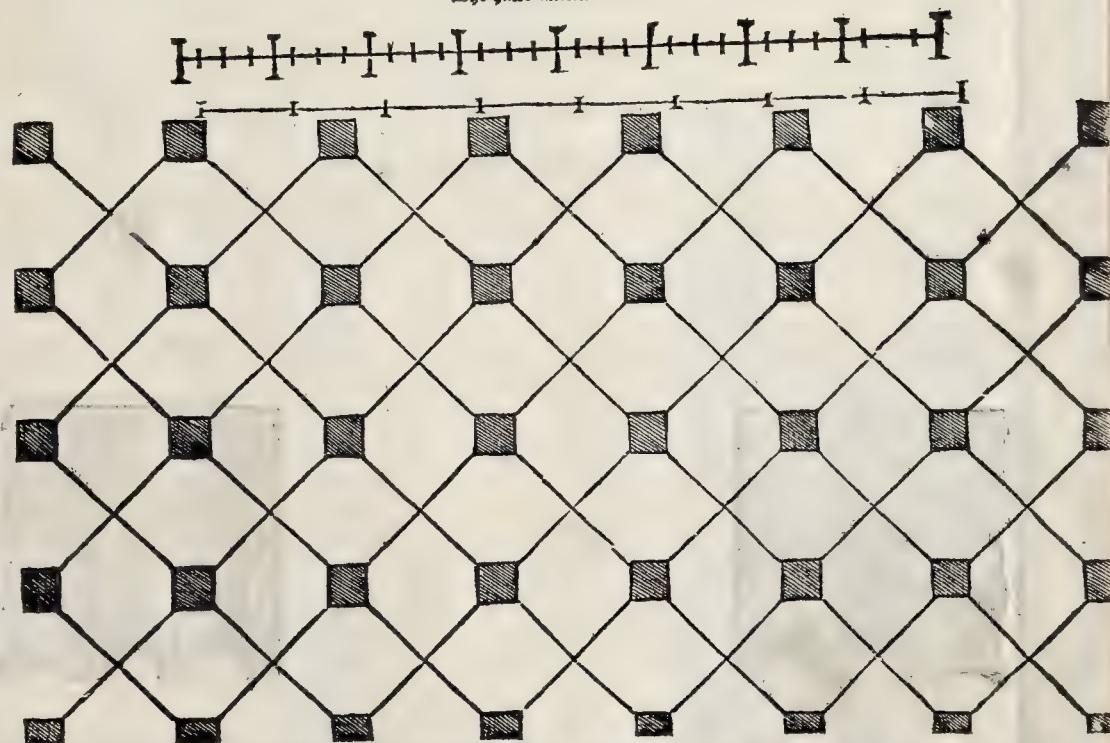
Of Antiquitie

For that (as I sayd) the ground of Dicclesians Therme, being placed in so sir all a forme, can hardly be measured from part to part; therfore I haue made a part thereof in greater forme, which standith hereunder, and is like the middle thereof, as the letter A. sheweth: and the line in the middle thereof, is also 100. Palmes, like the other; whereby a diligent workeman may almost finde all the measures thereto with a paire of Compasses.



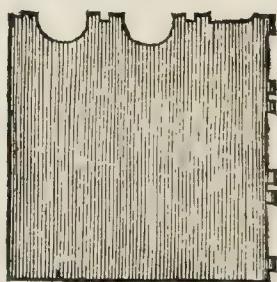
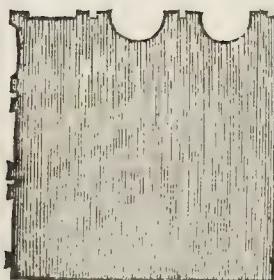
The Therme made by Dioclesian, was used for divers common and open sports, and specially to bathe in; whereunto it behoueth to have great quantite of water, which was brought by pipes a great way off; and it was kept in certaine Cellernes, which stood in the Therme of Dioclesian, in this manner as is hereunder set downe: It was made with Pilasters, and above it was crosse roised, with walles abowth them, of very good stalle; which was so staine, that at this day it is yet to be seene: the thicknesse of the pilasters is of each five foure foote: betwene each two pilasters is 12. foote of the old Romane foot, although the said Therme is measured with Palmes: and this line herewynce was is halfe an alde foote.

The halfe ancient foote.

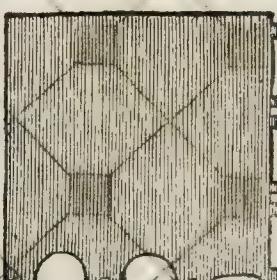
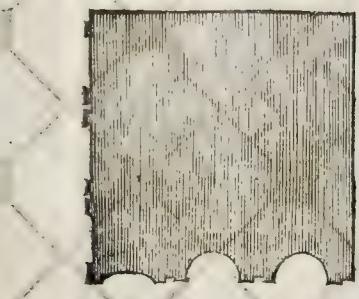


Of Antiquitie

In Rome there are many ancient Tryumphant Arches, among the which, this Building, by the greatest riuumber, is accounted for a Tryumphant Arch: yet by the knowledge that men have of it, it is thought to be a Porticus, or a Gallery, like unto a Borse or Exchange for Merchants: it may be it was made by some one nation alone; as yet to this day in great Towres and Cities, every nation hath a severall place, although they are not by that means defined. This Porticus or Gallery stood in Nelsor Boario; and in ancient time was called, The Temple of Janus: which is measured with the ancient Palme. This Building hath four gates, as the ground heremder doeth shew: betwene the one and the other Pilastry, there are 22. Palmes: round about this Porticus, there are 48. niches or hollow places: but there are no more then 16. to set Images therein; all the rest are but for shewes, as being not deepe enough cut into the wall. whiche places were beautified with small Pillars somewhat bearing out from the wall, as you see them, and were Corinthia worke, but now it is spoyled of all such ornaments.



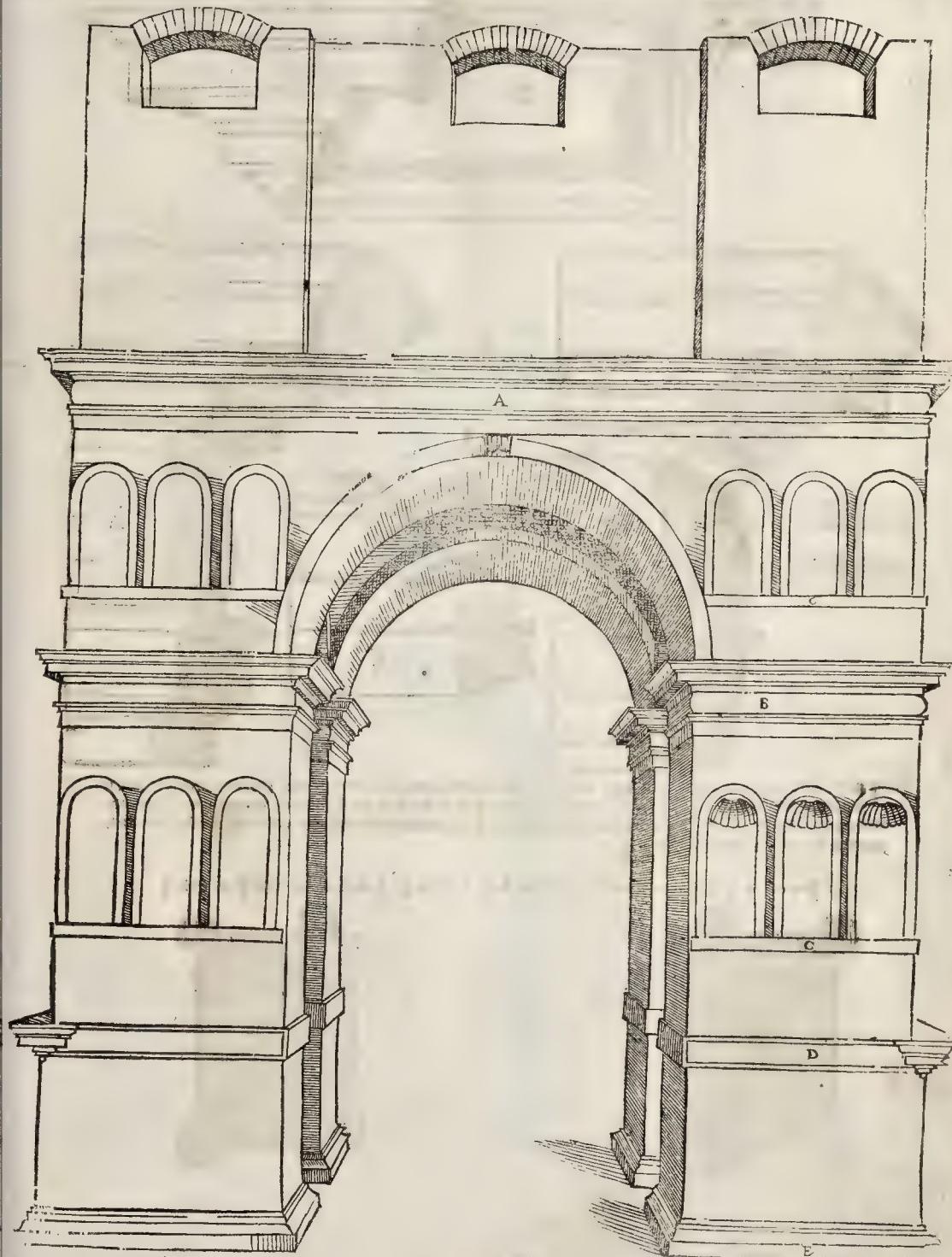
The ground of the Figure following.



The third Booke.

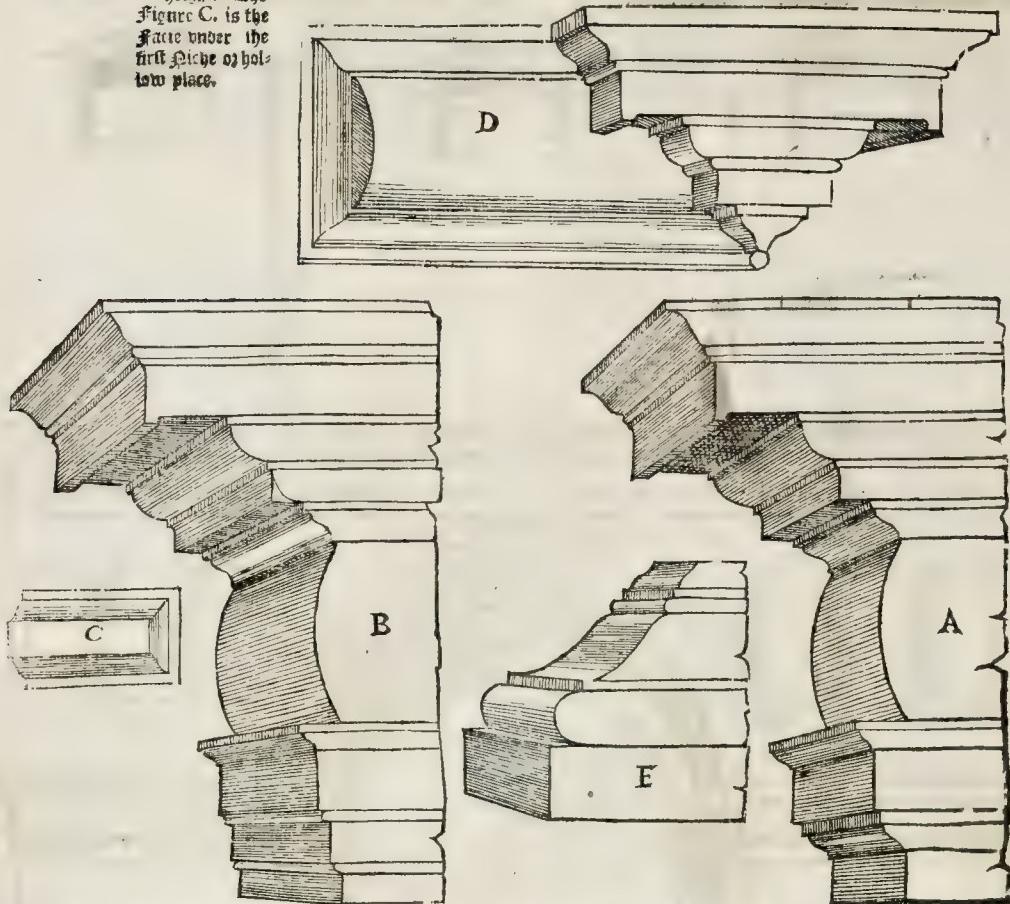
The fourth Chapter. Fol. 48

He height of the Arch is 44. Palmes : the height of the Bases beneath, marked E. is 1. Palme and an halfe. The Facie D. within the corners, is turned into a Cornice, and is the like height. The iudgement of the workman pleased me well in y piece, which is, that he made no Cornice in the innermost part, that might trouble the people that shoulde be therein : the height of the other Cornices are not measured, but the soveraines of them diligently counterforted, follow hereafter.

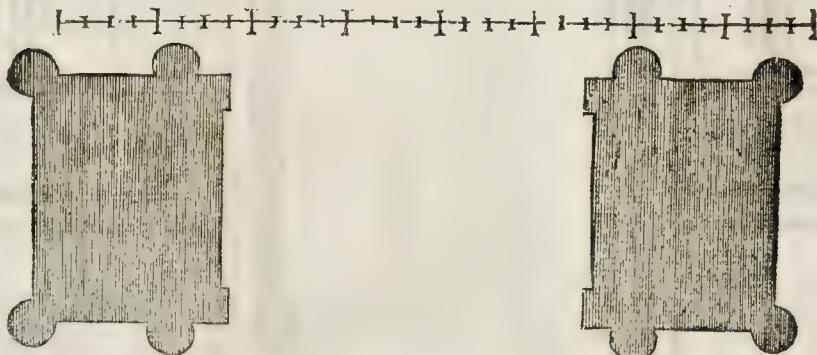


Of Antiquitie

The five pieces of Coracles herounder set downe, are the ornaments of the Porticus aforesayd. The Base B. and the Face D. were measured, and in this forme, the great measure set downe; but the other were counterfeited by sight, with their heigh's where they stands: and there is little difference betweene the one and the other, for parts, and also in height. The Figure C. is the Face under the first Niche or hollow place.



The Arch Tryumphant, next following, is called Titus Arch Tryumphant; whereof this Figure herounder, is the ground, and is measured with the ancient fote. The widenesse of the Arch is 18. fote and 17. minutes. The thicknesse of the Column, is a fote and 26. minutes and an halfe. The fote wherewith this is measured, is of 64. minutes, whereof the halfe is here set downe.



The third Booke.

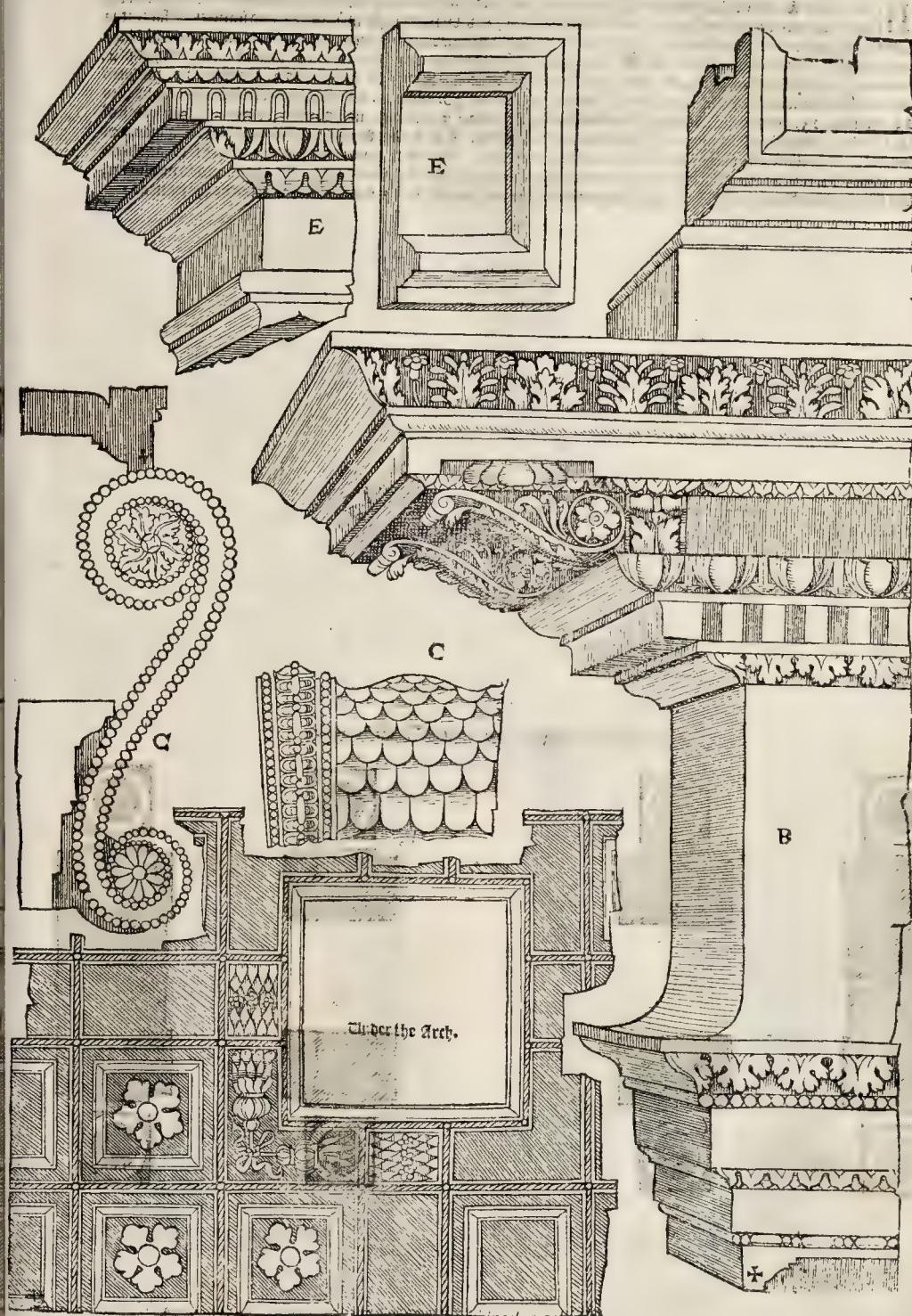
The fourth Chapter, Fol. 49

I have spoken of the widenesse and thicknesse, now I will set downe the height: And first, the height of the Bow or Arch is as much agayne as the breadth. The Vale of the Proefall is 2. fote 4. minutes lesse in height. The Cor-nice of the Pedestall is 3 5. minutes high. The height of the Bases of the Columnes is about one fote: all these parts, and also the Capitall of the Columnes, well proportioned in measure, stand in the beginning of the Composita Order, in my fourth Booke. The flat of the Pedestall is fourteene fote and a halfe high. The height of the Columne without Base and Capitall 17. fote and 13 minutes. The height of the Capitall is 1. fote and 27. minutes. The height of the Architrave is one fote and 19. minutes. The Frise is one fote and 17. minutes. The Cornice is 2. fote and 6. minutes high. The Basement of the Epitaph is of the same with the Frise. The height of the Epitaph is 9. fote and 12. minutes: the breadth is 23. fote: which members shall hereafter be set downe, and figured more at large.



Of Antiquitie

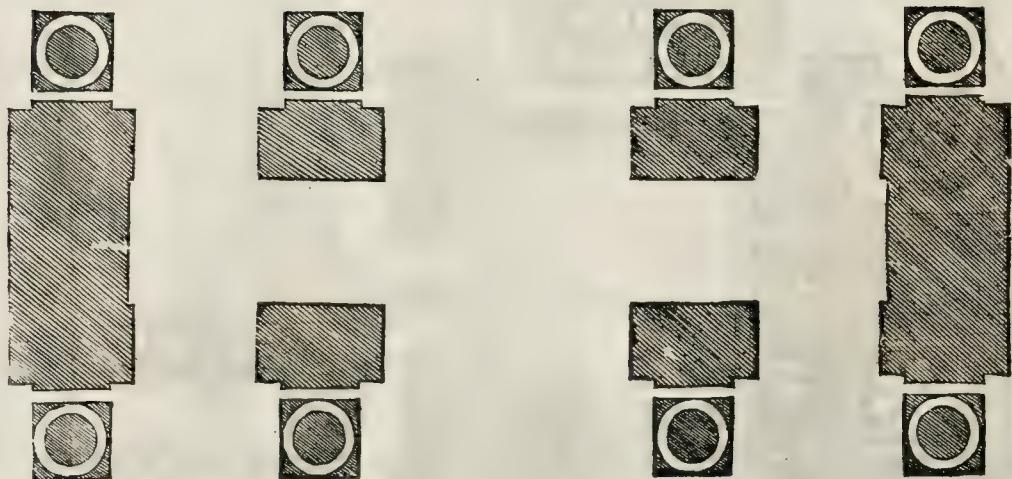
It would be troublesome both to the writer and to the Reader, if I should set downe all the parts of these Ornamentes, from member to member, as they are diligently measured; & that not only with soote, but also with parts of minutes: but I have taken the partes only to set the same downe out of the great into the small forme, in such sort, that he that is discrete, may with his Compasse find the p[ro]portion therof. It is true, that the Ornamentes of the most part of the Tryumphant Arches in Rome are much contrary to Vitruvius writing; and this, I thinke, is the cause, that the sayd Arches are, for the most part, made by the Roofes of other buildings, (that is, of as many sortes of pieces as they could get:) and it may be, that the workemen in those dayes were selfe willed, and stood not much vpon observation, because they were thinges forvning for Tryumphs, and it may bee (as it hapneth oftentimes) made in haste. That part here on the side set downe, marked A. is the Vale of the Epitaph. B. is the highest Cornice, Frise, and Architrave: which Cornice, in my opinion, is very licentious for divers reasons: The first, it is proportioned to high: from the neither Architrave, and aboute it, there are too manie members, and especially Ovules and Dentiles, which standing alike in one Cornice, are distilued by Vitruvius: notwithstanding it is very well wrought, and specially the Scima above: but had I such a Cornice to make (obstaining the right order) I would make the Scima lesse, and the Centice more: I would leue the Ovules as they be, and I would not cut the Dentiles, but the Cinated. The Architrave her of pleaseth mee well enough. The two members marked C. shew the Facie and the Profill of the Mensola, which is the cloing ston of the Arch. The members marked with E. are, in truth, rich for worke, but yet so rich, that the one darkeneth the other: but if the parts were so deuided, that the one were grauen, and the other playne, I would command it more. And herein the workeman that made the Pantheon, was very judicious, for that poure no such confusion in his Ornamentes. The worke vnder this Arch is very well made and deuided; it is also a faire Compartment, and rich of worke. But it may be, that such as are to much concerte to command Antiquities of Rome, will (peraduenture) thinke that I am too bold to censure upon that which hath bene made by such skilfull ancient Romanes; but in this respect I would haue them take my speches in good part, for that all my intent is, to shew it them that know it not, and such as will subiect themselves to heare my opinion: for it is not sufficient to miske ancient things as they stand, but it is another thing with Vitruvius advice to chuse out the best and fairest, and to reject the worse. It is true, that the chiefest part of an Architecto is, that hee mislike not himselfe in giving his censure, as many doe, who being obſtinate in their opinione, make all things as they haue ſene them, and hereby couer their unskillfulness, without giving any other reaſons of things: and ther're are ſome that ſay, Vitruvius was but a man, and that they alſo are men ſufficient, to make and invent new things, without regarding, that Vitruvius conſecutly to haue learned it from ſo many ſkilfull men, partly in his owne time, as alſo by meaſes of the writing of other workemen.



Of Antiquitie

Beneath the Campidoglio there is a Tryumphant Arch, which by the inscription may be concerned to be made in the time of Lucius Septimus Severus, and under his name, and by that which men make and sufficiently find, it is made with Rosies of other buildings: it is also well adorned with god cutting and graving: it is richly brought both on the sides, and also before and behind: it was measured by the old Romane Palme of 12. fingers, every finger of 4. minutes, which in total maketh 48. minutes. The widenesse of the Arch in the middle is 22. Palmes, 15. minutes and a halfe. The widenesse of the Arches on the sides is 9. Palmes, 30. minutes. The thicknesse of the Arch in the sides is 23. Palmes, 25. minutes. The little Gates within the Arches are 7. Palmes and 30. minutes wide. The breadth of the Pilasters with the Columnes is 8. Palmes and 7. minutes. The thicknesse of the Columnes is 2. Palmes, 30. minutes. The thicknesse of the hal Columnes is 28. minutes. This Arch is now under the earth as farre as aboue the Pedeall, (for so high the earth is there rased with the raines) but there was a part left uncovered to measure it, but they could not come to the Vale to take the measure thereof, because it was troublesome to remoue the raines.

The ground of the Arch Tryumphant of Lucius Septimus.



The third Booke.

The fourth Chapter. Fol. 5t

Beside, I haue set downe all the measures of this Arch, touching the Ichnographie, that is, the thicknesse and breadth, now I will speake of the height. The height of the middlemost Arch, is 45. Palmes and 3. minutes. The height of the Arches besydes are 25. Palmes. The height of the Pedestall, is about 10. Palmes. The thickenesse of the Columns, is 2. Palmes and 30. minutes in Diameter beneath; but above under the Capital, they are 2. Palmes and 16. minutes. The height of them, is 23. Palmes and 25 minutes. The height of the Architrave, is one Palme and 30. minutes. The height of the Frieze, is one Palme, and 3. minutes. The height of the Cornice, is two Palmes and 14. minutes. The height of the Plinthus, above the Cornice, marked X , is 29. minutes. The base above the Plinthus, is halfe a Palme. The uppemost Cornice, is one Palme and 2. minutes, and proportioned in a greater forme.

IMP. CAES. LVCIO SEPTIMO. M. FIL. SEVERO. PIO. PERTINACI AVG.
PATRI PATERAE PARTHICO ARABICO, ET PARTHICO ADIABENICO
PONTIF. MAX. TRIBVNIC. POTEST. XI. IMP. XI. COS. 3. PRO.

COS. ET. IMP. CAES. M. AVRELIO. L. FIL. ANTONINO. AVG.

PIO FELICI TRIBVNIC. POTEST. VI. COS. PROCONS. P. P.

OPTIMIS. FORTISSIMIS QVE PRINCIPIBVS

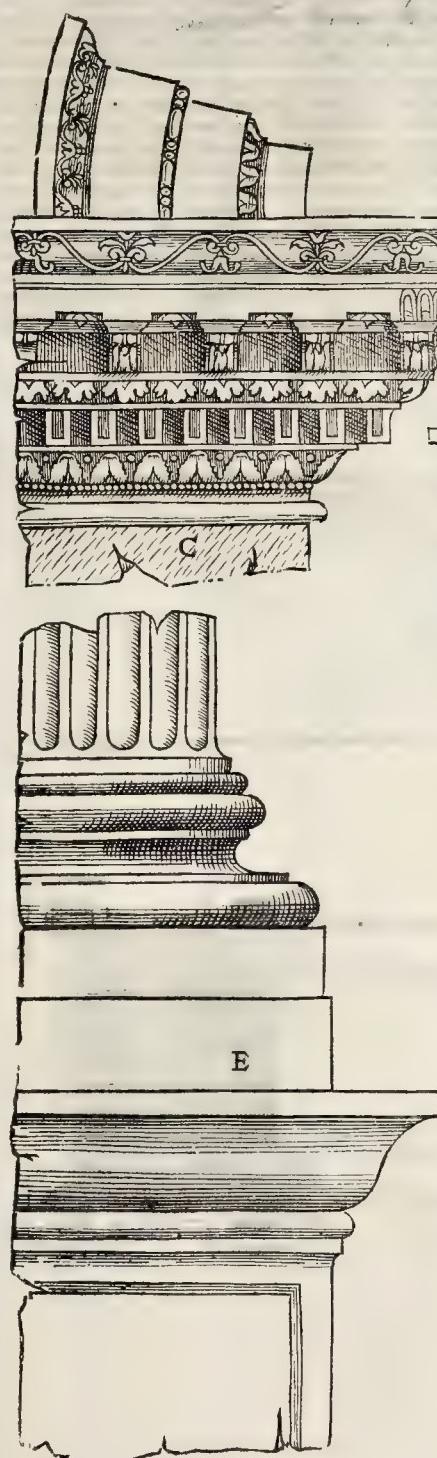
OB REMPVBLICAM RESTITVTIAM IMPERIQ. POPVLI ROMANI PRO.
PAGATVM INSIGNIBVS VIRTUTIBVS EORVM DOMI FORISQ. S. P. Q. R.



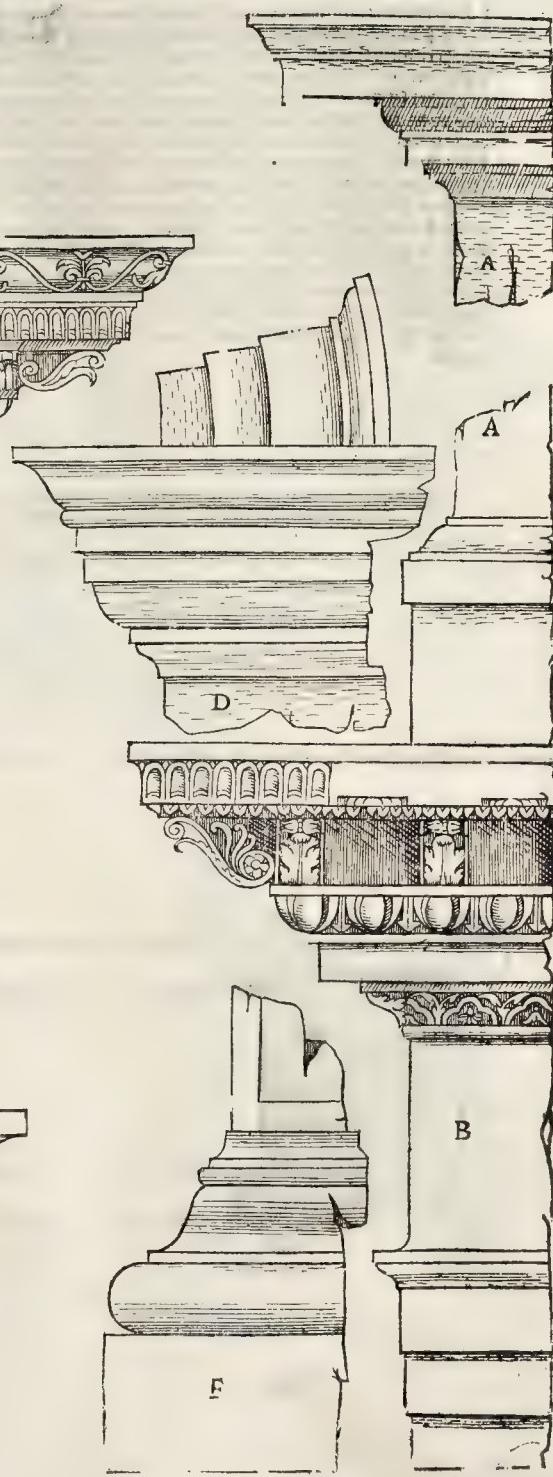
Of Antiquitie

In the side before, I have set downe all the heights and breadths of the Arch Triumphant, of Lucius Septimus Severus: now I will shew the particular, and severall parts thereof, as I said before. There is no meature of the Vale of the Pedestals; but it may be thought, that they containe as much at the least, as the Cornice of the Pedestals; which Cornice is a Palme, and so much the Vale may hold: of which part, the same standeth here in the middle, marked G. The Vale of the Column standeth thereby marked F. the which Vale hath a stome or counter-Vale under the Plinthus: and this may peraduenture be done, because the Columnes could not reach to such a height as they shoulde. The Capitall is here not set downe, because you shall see the like in the beginning of the Order, called Composta, in my fourth Booke, for this is Composta worke. The height of the Architrave, is one Palme and 30. minutes: the Frise is 9. Palmes and 3. minutes: which Frise, for that it is full of graving, sheweth of a small height where it standeth: and by Vitruvius writing, it ought to stand the fourth part higher then the Architrave; and this is lesse. The height of the Cornice, is two Palmes and 14. minutes: which in truthe is much too high, according to the proportions of the other members; and it sheweth so much the greater, because it hath moze proiecture of height: and this makes me specially beleue, that this Arch is made of diuers pieces of other buildings, because of the shrunkening of the members. The forme of the Architrave, Frise and Cornice, is marked with B. The height of the Vale, above the said Cornice, is halfe a Palme: the height of the last Cornice, is a Palme and two minutes, and hath such a great proiecture, and hanging ouer, as you see in the Figure: and in such place, I blame not the Cornice; but affirme that it was made with great judgement: for that the great proiecture makes the Cornice shew greater, because it is lane from under upwards, and for that there is like matter, it is not in bane for the building. This Cornice here is marked with A. The Cornice which beareth by the greatest Arch, is marked with C. whereof the Proiecture is much too great: and for my part, in such a subject, I would rather give judgement that it shoulde be high, that with the bearing out, it shoulde not hinder the sight of the Arch. That wchke marked D. commeth right on the Face, which goeth from Column to Column, above the two little Arches; and this accompanieth the Cornice C. The Cornice marked with E. is that which upholdeth the final Arch, the which Cornice hath a Scima, which I shoulde not make in such a piece of Worke: for that all Cornices, whose crownes haue not their iust Proiecture, are uncomely: for the faycest part of a Cornice, is, that the crowne bee of a god height, and of a good proiecture: wherefore I set it downe for a common rule, that the crownes that are higher then their Scima, and those at least, that shall haue as much Proiecture as height, shall alwayes be commended by men of vnderstanding. This I thought good to set downe, to aduertise them thereof that know it not.

The third Booke.



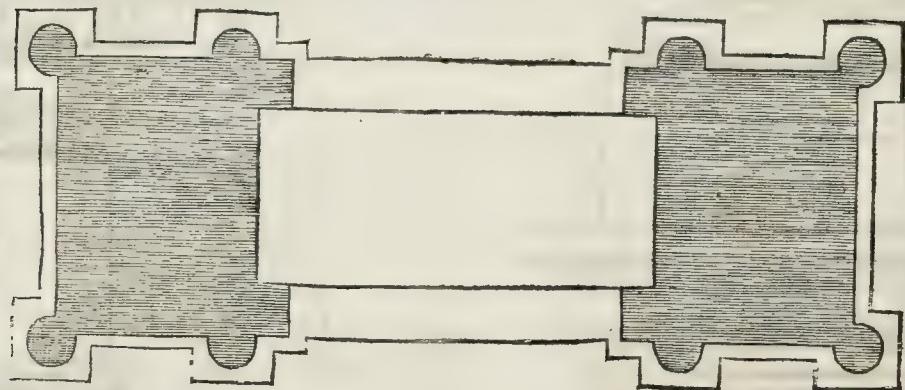
The fourth Chapter, Fol. 52



Of Antiquite

In the kingdome of Naples, viz. betwene Rome and Naples there are many Antiquities; for that the Romanes had great pleasure in those places: among the which, this Tryumphant Arch is one, being yet all whole and faire to sight: and therefore I thought it good to set it among the number of the rest of the Arches (which were made by the Romanes.) This Arch is at Beneuente, on this side of Naples, and was measured with a moderate Ell, whereof the third part is hereunder set downe. The Figure here below, is the Chronographie of the same Arch; and to shew by how much the Arch was made, I ne meddle, because it may be understood by the writing that standeth thereon. The widenesse of the Arch, is eight Ells: the thicknesse of the Columnes, is an Ell: the Pilaster under the Arch, is also as broad: the inter-columne holds three Ells: the height of the Arch is almost as much againe as the breadth: the height of the base of the Pedestall, with the under-base, is one Ell, ten ounces and six minutes: the flat of the Pedestall, is two Ells, ten ounces and six minutes: the height of his Cornice, is nine ounces: the height of the bases of the Columnes, is seven ounces: the height of the Columnes, without bases or Capitals, is nine Ells and four ounces. The thicknesse of the Columnes beneath, is an Ell in Diameter, and above is lessened a sitt part: the height of the Capital, is an Ell, five ounces and an halfe: the height of the Architrave, is 15. ounces: the Frieze is seventeen ounces high: the height of the Cornice, is one Ell, three ounces and an halfe: the Pinax, which stande hath counter-base above the Cornice, is 19. ounces and a quarter high: the base standing vpon it, is 11. ounces high: the height of the Epitaph, is four Ells and two ounces: the height of the outermost Cornice, is one Ell and thre minutes: the height of the impost of the Arch, is halfe an Ell.

This Ell wherewith the Arch is measured, is divided into 12. ounces, and each ounce into 5. minutes, which comes from 12. ounces to 60. minutes: and this is the third part of the said Ell.



IMP. CAESARI. DIVI NERVAE FILIO,
NERVAE TRAIANO OPTIMO AVG
GERMANICO PONT. II. MAX. TRIB. I.
POTEST. XVIII. IMP. VII. COS. VII. PP.
FORTISSIMO PRINCIPI. S. P. Q. R.

B

C

D

E

F

Of Antiquitie

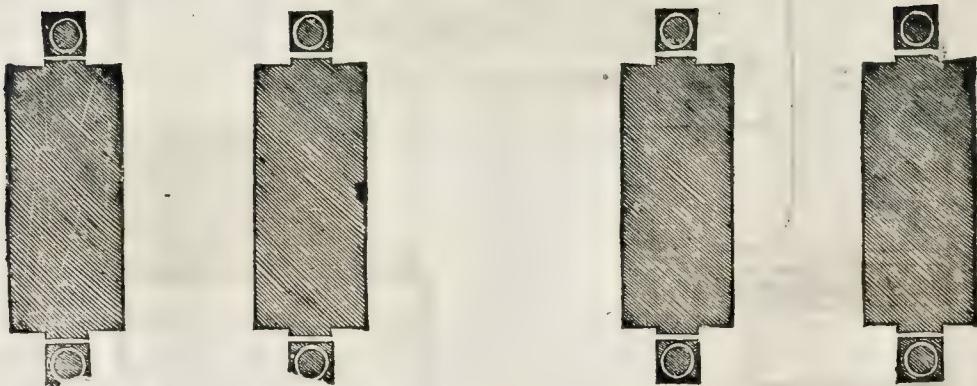
The Ornaments of the Arch of Beneventen, which I haue shewne in the lease before, are here, according to the measures set downe, with the Originall. The Base of the Pedestall, and the Cornice therof, marked F. are, in truth, two pieces of good proportion, and faire pices for Cognicements. The Base of the Pedestall, together with the Counter-base under it, is one Ell, 10. Dunces and 6. inches high: the Cornice of the said Pedestall is 9. Dunces high: the Base of the Columne is 7. Dunces high, and is of Cosinthis worke, very well proportioned according to the Columne, and standeth heere marked with E. I haue not set the Capitall here: say that men (as I say before) shall haue such a one in the beginning of the Composita, in my fourth Booke, because this Archis Composita wylle. The Arch, Frise, and Cornice, which stand above this Columne, are here marked with C. which paces are also well proportioned on the remnant of ths building: and although that the Cornice is somewhat higher then Virtuous would haue it, neverthelesse it is well proportioned of members, and the same flat is not in it that is found in other Cornices, which haue the Tistles and the Dentiles standing together: but this workeman, being circumfret therin, would not cut the tath in the Dentiles, althoough he hath set the forme thereof in the Cornice, to steme such a slander. The same consideration the workeman that made the Pantheon had, in the first Cornice above the Chappells, round about the Temple within: and therefore I command a workman, to auoyde such a scandall, and not to reprofe hymselfe by the doing of licencious and wilfull workmen, and eroye themselves, saying, Ancient workemen made it, and therefore I may make it as well as they. And although some will argue and say, Why so many workmen, and in so many places of the world, (not onely in Italy) but also in divers other places, haue made Cornices, with Tistles, and ingraven Dentiles, and that such a custome is now turned into a Law, yet I would not obserue the lame in my workes no counsell others thereunto. The Counter-base, under the Epitaph, aboue the Cornice, marked B. is 19. Dunces and a halfe high: the height of the Base therupon is 11. Dunces: the height of the Epitaph is 4. Ells 4. Dunces; the height of the Cornice is one Ell and 2. Dunces. I much commend the Base of this Epitaph. I commend the Base of this Epitaph, with so little protectione, for the swingyng up under it, but the Cornice whereof I will speake, is much too high, according to the proportion of the Epitaph: but were it of lesse height, and the Crowne more, and of more protectione, I judge, it would stand better, and I should command it more: also, if there were not so much carvynge or grevynge in it: for the members ought so to be deuided, that the one were playne, and the other grauen. But there are many workmen, and most at this day, that, to make men take pleasure in their bad workmanship, make so many cuttings in it, that therby they confound workmanship, and take away the beauty of forme from it: and is cuer, in times past, that fall and singe things, bryght, were by shifful workmen commended, at this time they are not so. This Figure, marked D. is the Impost of the Arch, and is well knowne for such a member: the same Cornice changeth it selfe in a Facie, which goeth round, as you see, and is halfe an Ell high: and although this Impost of the Arch sheweth no Sculpture, yet is it grauen where it standeth; but I forgo to draw it so.



Of Antiquitie

By the Amphitheater of Rome, which by the people is called Coliseo, there standeth a very faire Tryumphant Arch, which is wonderfull rich of Ornamentes, Images, and divers Histories. It was dedicated to Constantine, and is vidently called, Larco de Trafili. This fayre Arch, although it is now buried a great part within the earth, by meanes of the ruines, and rising of the earth, is neuerthelesse of great heigh, and the Gates and passages through it, are yet higher then two soure squares. This Arch (as is before sayd) is passing fayre to the eye, and wonderfull rich of Ornamentes & graving. It is very true, that the Cornices are not of the best maner, although they be exceeding richly graven, whereof I will speake hereafter. This ground hereunder, sheweth the Ichnography of the said Arch Triumphant, and was measured with the old Romish Palme: the breadth of the greatest Arch is 22. Palmes and 24. minutes: the widenesse of the lesser Arches on the sides is 11. Palmes, 11. minutes and a halfe. The thicknesse of the Pilasters are 9. Palmes and 4. minutes: the thicknesse of the Arches in the sides, is 21. Palmes and a halfe: thus the place within the Arch is almost soure square: the thicknesse of the Pedestals is 3. Palmes and 29. minutes: the thicknesse of the Columnes is 2. Palmes and 26. minutes; which Columnes are stricket or hollowed, by some called chaneld, and are whole round with their Pillars behind them.

The ground of the Arch Tryumphant of the Emperour Constantius.

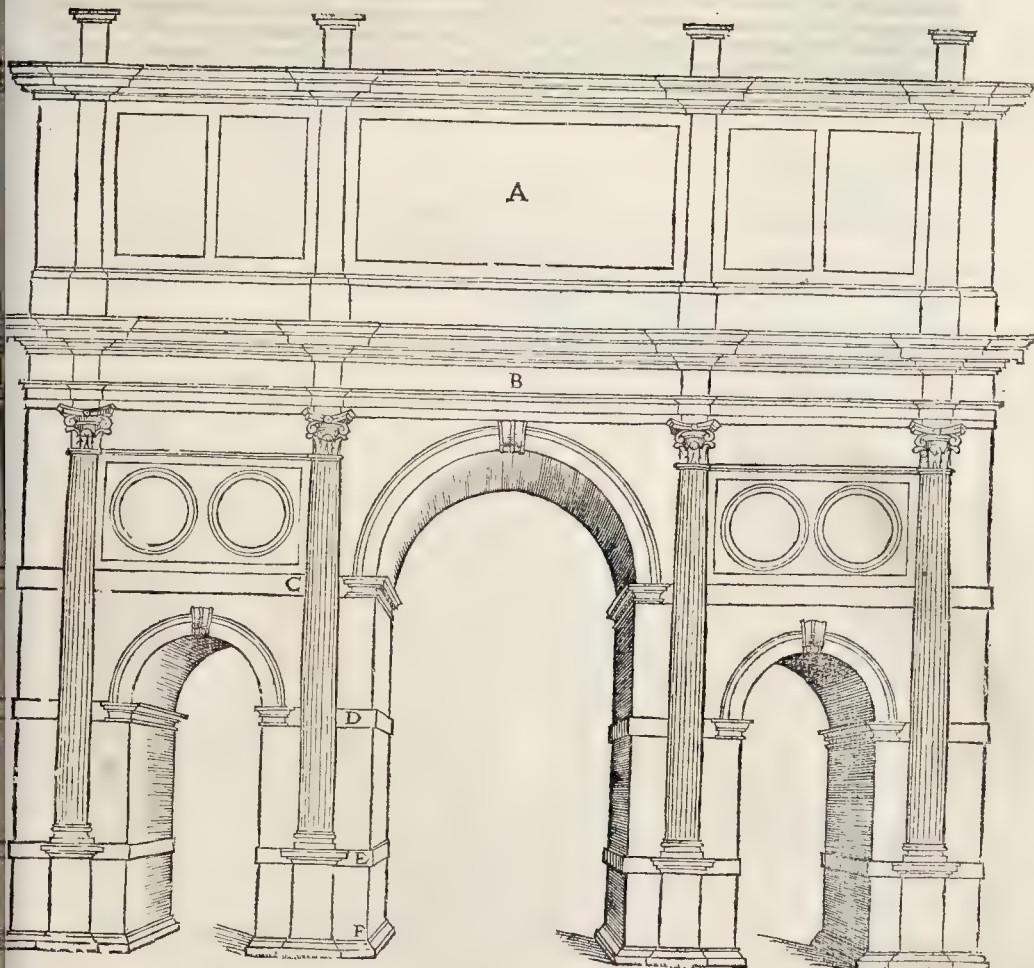


The third Booke.

The fourth Chapter. Fol. 55

The widenesse and thicknesse of this Arch, is sufficiently set downe; now I will speake of the height thereof: and first, the Vale of the Pedestall, with the Plinta, is one Palme and 30. minutes high. The height of the flat, is 7. Palms and 5. minutes: the height of the Cornices of the Pedestals, is 42. minutes: the height of the counter-Bale, under the Bale, or the Plinthus of the Columnes, is fiftie and two minutes: the height of the Bale is 60. minutes: the height of the body of the Columnes, without Bale or Capitall, is 26. Palmes and 25. minutes: the height of the Capitall, is 2. Palmes and 35. minutes, and is Composita. The height of the Architrave, is one Palme and 11. minutes, but the Frise is much lesse, and yet graven; whiche, as I have said, at other times is contrary to the doctrine of Vitruvius. The height of the Cornice is a Palme and 21. minutes. The height of the counter-base, under the second story, is 3. Palms and 9. minutes: from thence to the highest part of the Cornices, is 21. Palms: but the height of that Cornice is 33. minutes. The Pedestals above the same Cornices were not measured, and therewer stood Images, and above the Cornices marked B, were Images placed against the 4. Pillasters, which represented the prisoners with whom he went in triumph. The letters which stand here, are above the Arch, in the place marked A, besides many others, which stand in divers places of the Arch.

IMP. CAES. FL. CONSTANTINO MAX. P. F. AVGVSTO. S. P. Q. R.
QVOD INSTINCTV DIVINITATIS MENTIS MAGNITUDINE, CVM EXER-
CITV SVO TAM DE TYRANNO, QVAM DE OMNI EIVS FACTIONE,
VNO TEMPORE IVSTIS REPVBLICAM VLTVS EST ARMIS, ARCVM
TRIVMPHIS INSIGNEM DICAVIT.

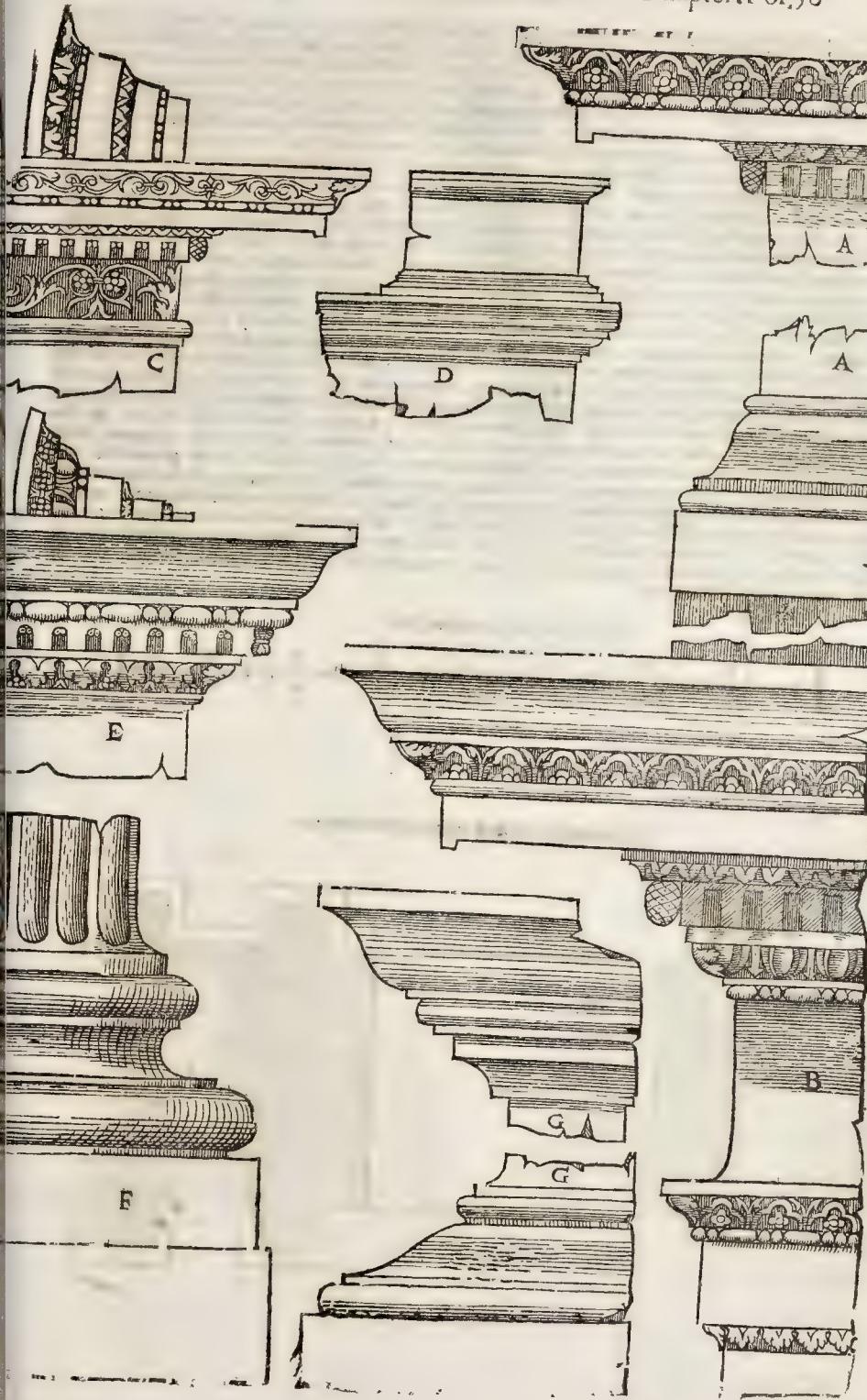


Of Antiquitie

I have spoken of the proportion of the measures of the Triumphant Arch of the Emperour Constantine: now I will speake of the severall parts and Cornicements, and set their measures downe. And first, the Base marked F. is of the Pedestall of the said Arch: the height whereof, is a Palme and 30. minutes. The height of the Plinths vnder the Base is 28. minutes: the rest of the parts are meauurable deduced, and proportioned accordingly. The height of the Cornices of the Pedestall, which stand marked vnder the Base E. is 42. minutes, and is also proportioned according to the principall. The counter-Bale, vnder the Bale of the Columnes (which I thinke were placed there accidentally) to heighthen the Columnes, is 32. minutes high: the whole height of this Bale of the Columnes, is 52. minutes: touching the height of the Columnes, I spake before, and also of the Capitals, of which Capitals, the forme standeth not here, for that the like doth stand in my fourth Booke, of the O^rder of Composita: the height of the Architraves, Fraues and Cornices, is also spoken of before: and this Cornice is very flemely, for that there is no licenciousnesse in it, which is in some other Bales of this Arch; as it is in the impost of the middlemost Arch, marked C. which impost is greater and of more members and parts, then the great and principal Cornice, and is altogether confus'd in members, and that which is most intolerable, the Dentiles and Buttles are one above the other: and although the Dentiles were not there, yet there needed not such a Cornice to beare vp an Arch. Herein the workeman of the Theater of Marcellus was more circumspect then this: for the imposts of the Arches of the said Theater, are the fayrest and best of shew for imposts that ever I saw, and such, as from the which a man may leaue to make the like. The impost of the lesser Arches marked D. is one Palme and 23. minutes and an halfe high: the which impost would stand much better, if the two flats betweene the Astragall above, and the Ochine vnder, were turned into playnnesse only; which then wold serue for an Abacus, or also for a crowne, hauing the due Projecture. The Bale vnder the second story marked A. is 16. minutes high: the height of the uppermost Cornice, is 43. minutes, which height shoulde bee too little in so great a distance, if it were not that the great Projecture or Gallery, or overhanging holpe it not; because they are seeing vpwards, from vnderneath, which shewth it to be much greater then it is: therefore I much commend this Cornice in this respect. And truly, all the Cornices, whereof the crowne hath more projecture then height, answere alwayes better, and may be made thinner of stone, so that the members of the building endure lesse waught: neverthelesse, you must not make them of too many licentious projectures: but you shall read hereof in Vitruvius, where he entreateth of the O^rder of crownes, after the maner of Ionica and Dorica: so he doeth there teach you clearly enough.

The third Booke.

The fourth Chapter. Fol. 56



This Fig:
ture shoulde
stand in
Folio 52.
and the Fig:
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this place.

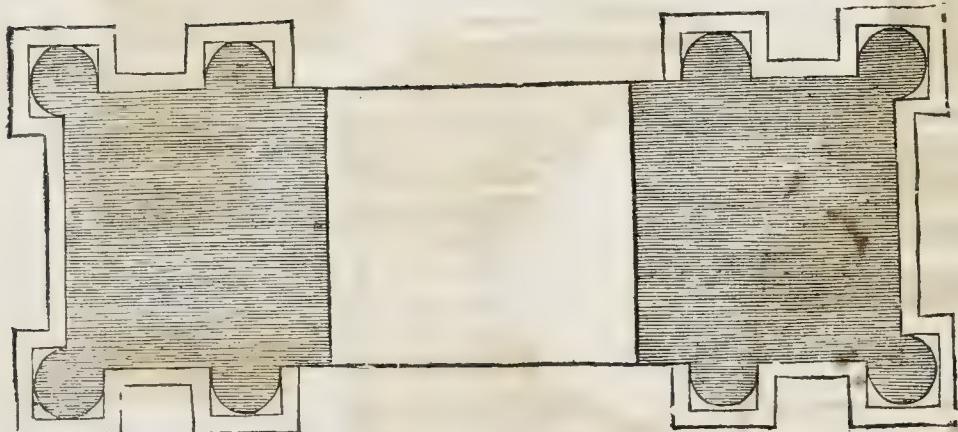
Of Antiquitie

Without Ancouen vpon the hairen, there is an head which reacheth it selfe a good way into the sea, which was not made without great cost and charges: it was to defend the shys from the Leuant sea. Vpon the end of the bright thereof, standeth an Arch tryumphant, all of Marble and Corinthia worke; and there is nothing in it but the Capital's, which are done in very good woorke: and in truthe, this building is so handsome, and of so good correspondence, the members also agreeing with the whole body, that a man, although he understand no Art, incould neverthelesse take p'asure in the beautie thereof. And those that understand somewhat, seeing such congruitie, are not only well contented, but also thank the good worfeman, that hath givens vs so newhat in these daies to learn out of this faire and well made building: in the ornaments whereof, there is the order of Corinthian as well blured and kept, as in any other Arch that is to be found, and by reason of the strength therof, it is all whole; onely it is vnsurpassed of many ornamenti. This faire Arch, as it is conceyued, Neus Traianus caused to be builded: whereupon, in the highest part of the Arch (as it is sayd) his Image was erected, sitting on horsebacke, seming to threaten the clouds and people, over whom he looked and governed, lest they shoud rebell againe: which Image was of Copper excellently well made. There were also betwene the Columnes, aboue the Cornices, certaine Images of Copper, as the letters in those places written, doe shew: there are also tokens of holes, which shelves that there were Kings of Copper, or other such like things hanging in them, which might bee taken from the Gothes, Vandals, or other enemies. This building was measured by the ancient foote, the grounde is hereof standeth herunder. The widenesse of the Arch is ten foote: the thickenesse inwards is nine foote and two minutes: the thicknesse of the Columnes is two foote, 11. minutes: the Intercolumnes, i.e spaces betwene the Columnes, is 7. foote 11. minutes: the Columnes stand without the wall, 1. foote and 11. minutes: the height of the Arch is 23. foote and 1. third part: and this height, althoough it holorth more then two foyre squares, is not therfore milchopen, when you behelv the whole masse together: the height of the Pedestals with all their Cornices, is 5. foote: the breadth is h[er]efoote 15. minutes and a halfe: the height of the Bas[ement]s of the Columnes, together with the Underbales are 1. foote and 36. minutes: the height of the Columnes to the Capitals, is 19. foote, 22. minutes and a halfe: the thicknesse vnder the Capital, is one foote and 36. minutes: the height of the Capital is 2. foote, 24. minutes, with the Abacus; and the Abacus is 10. minutes: the sayd Capital you shall find in my fourth Booke, in the beginnig of the order of Corinthia: the height of the Architrave is one foote and 12. minutes: the height of the Frieze is one foote and 18. minutes: the height of the Cornice is 1. foote and 22. minutes: the height of the Plinthus aboue the Cornice, is one foote, 6. minutes and a halfe: the height of the Bale aboue the said Plinthus, is 39. minutes: the height of the Epitaph vnter the Cornice, is 6. foote and 22. minutes; but the Cornice aboue it was not measured.

The halfe of the old Romanis foote.



The ground of the Arch tryumphant of Ancouen.



The third Booke.

PLOTINAE AVG. CONIVGI AVG.

The fourth Chapter. Fol. 57

DIVAE MARTIANAE AVG. SORORI AVG.

Imp. Cesari Divi Neruæ F. Neruæ Traiano
Optimo Augusto, Germanito Dacico. Pont.
Max. Tri. Pot. xix. Imp. xi. Cos. vi. P. P. Pro-
videncissimis Principibus. S; P; Q; R; *
Quod accessum Italiz, hoc esam addico. Ex Pe-
cunia sua, Portu taurorum Naugantibus reddiderit.

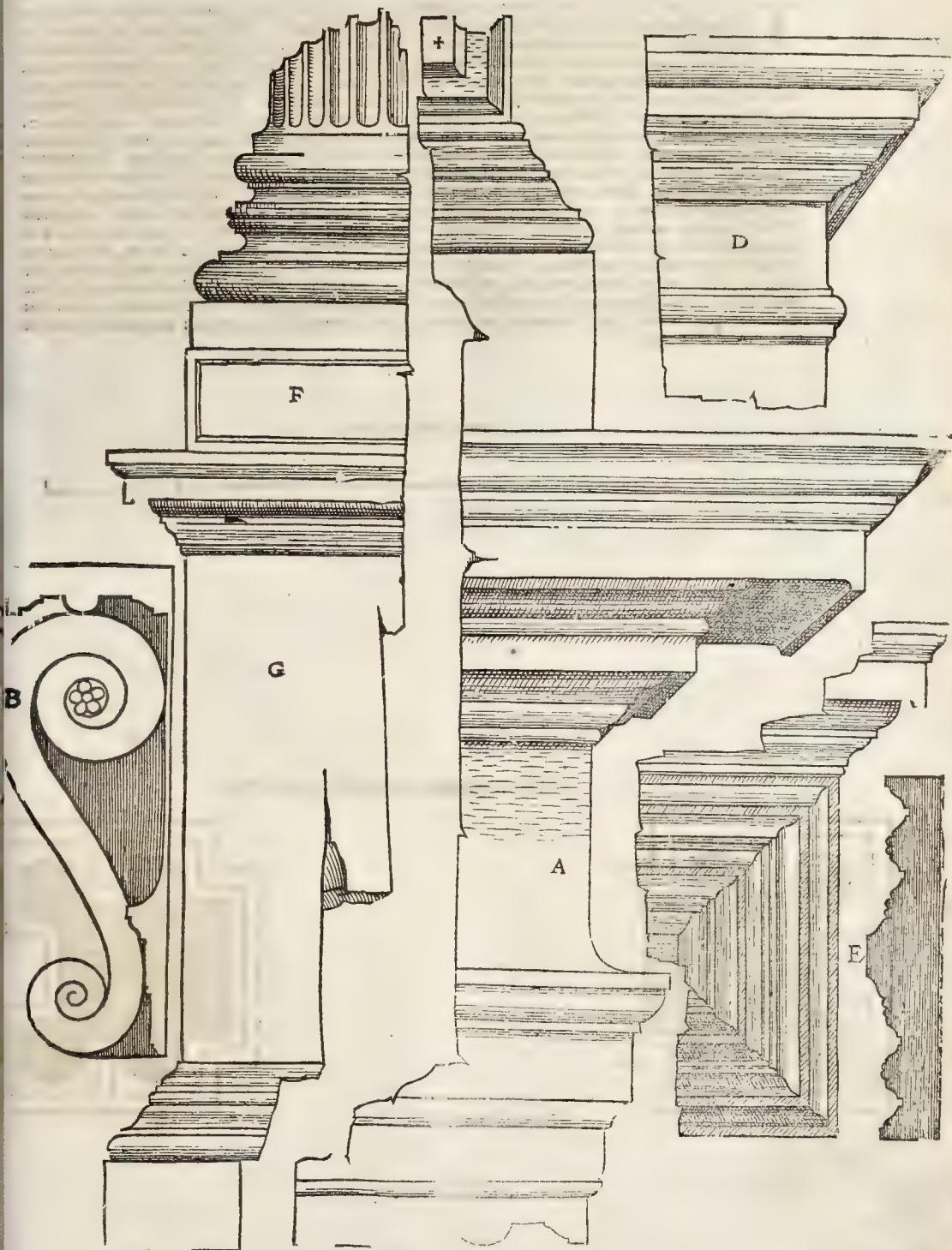


Of Antiquitie

In my opinion, I have sayd enough of the measure of the Arch of Ancona, yet that the parts of the Cornices may be the better understood, I will shew them here greater: and first, I will set downe the lowest parts, as they stand above the ground of the worke. The height of the Pedestall, marked G, is sayd to be of 5. foot, with all the Cornices thereto: but the height of the Plinthus of the Vale, is 18. minutes: the Vale above the Plinthus is 19. minutes, and a third part high: the Cornice of the Pedestall, is 20. minutes, and a third part high; so much doeth the stone also hold, standing thereby, marked F, which, by my aduise, is placed there, to heighten the Columnnes, and standeth not badly, but more, because it is set forth with a lift upon it; whereby the Vale diuersly from the Plinthus: and so, in my opinion, standeth well. The Vale, which is Corinthisch, together with the Cincle of the Column, is 43. minutes high: and the Prosciture, is 16. minutes and an halfe in height: the thicknesse of the Pedestall, is 3. foote, 15. minutes and an halfe: the thicknesse of the Columnne, is 2. foote, 11. minutes: and there stand 13. hollowings, or chanells, without the Pilaster: the widenesse of one chanell, is 7. minutes and a halfe: and the List which parteth them, is 2. minutes and a halfe. The height of the Capitalis are the thicknesse of the Columnnes below, without the Abacus: which Capital hath a very sayre forme, wherby we may be persuaded and belieue, that Vitruvius doctrine is false, and that Vitruvius understood the height of the Cap tall without Abacus: (and for this cause) for that the most part of the Capitalis that I haue seene and measured, are most of such height, and higher, and specially the Capitalis that stand in the Rotund: wherof, in the beginning of this Booke you may see one. The height of the Architrave above the Columnne, is one foote and twelve minutes. The height of the Frase, is one foote and eighteene minutes. The height of the Cornice, is one foote and two and twenty minutes. These thicke are marked together with an A. The Plinthus above the Cornice is one foote, five minutes and an halfe high: The Vale vpon it, is thricke minutes: the space wherein the letters are written, is five foote and two and twenty minutes, and is marked with X. The Impost of the Arch is marked D, the height whereof is 1. foote and fiftene minutes: but the uppemost Cornice, as I haue sayd, was not measured. The height of the Pensole in place of the closing Stone, marked B, above the Arch, is thicke foot and 30. minutes: and hath a foote and 14. minutes without the wall, in the uppermost part; and in the parts below, it comes out a foote. The four tables with the Cornices vpon them, which stand betweene the Columnnes, are thought to be placed there, for holding vp of halfe Images: the forme whereof, standeth here marked E, and is there also by the Profill on the side, whereby a man may see how they are wrought: for they are full of wozke, even to the Center. The height of the Cornices, standing about them, is 32. minutes: and although I haue not shewed all the Prosciture's heights from part to part, yet I haue with great diligence reduced them from the great, into a small forme, and were (as I sayd before of the selfe) measured with the old Romane foot.

The third Booke.

The fourth Chapter. Fol. 58

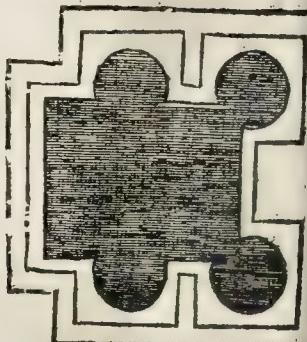
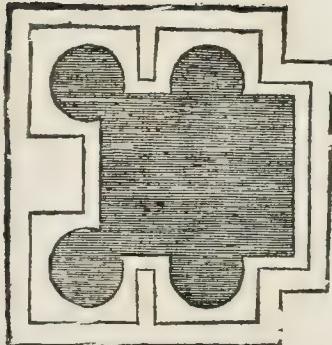


Of Antiquitie

The Towne of Pola in Dalmatia, is adorned with many Antiquities: besides the Theater & Amphitheater, whereof I speake before, there are other Buildings, wherof now I will speake. There is an Arch Triumphant, of Corinthia worke, rich of ornaments, for Figures, works, and strange devices; so that from the Pedestal upwards, there is no worke nor space left ungraven, not only before, but also on the sides, and within, and under in the Arch, wherein are many and divers worke, so that it would require long time to declare them particularly: therefore I will shew such parts thereof as are necessary for a workeman, for invention and Arte. The ground of the Arch following standeth hereunder, measured with a Poderne or common foote, whereof the halfe is here set downe. The Arch is 12. foot and a halfe wide: the height is about 21. foot. The pilasters in the sides inward are 4. foot thick. The thicknes of a Columnme is one foote, 9. ounces and a halfe. The Intercolumnis is 2. foot, 3. ounces and a halfe. The Pilaster of the Arch is one foot, 2. ounces broad. The height of the Plinthus under the Vale of the Pedestall, is one foote. The Vale is 4. ounces high. The flat of the Pedestall is 3. foot: the Cornice 4. ounces. The Plinthus marked V. under the Columnmes is 4. ounces. The height of the Vale with the Plinthus is 10. ounces and one quarter. The height of the Columnme is 16. foot, one ounce and 3. quarters. The height of the Capitall is 2. foot and one ounce. The height of the Architrave is one footes and one ounce. The height of the Frise is one foote and 2. ounces. The height of the Cornice is one footes and 10. ounces. The height of the Plinthus above the Cornice is one foote and 2. ounces. The height of the Vale of the Pedestall, and also of the Plinthus upon it, is one foote and 2. ounces; but the height of the Vale alone is 10. ounces. The height of the flat of the Pedestall is 2. footes and one ounce. The Cornice is 6. ounces. The Gaunt aboue the Cornice, (which Vitruvius, as I thinke, calleth Corona lis) is 3. ounces; and this is the measure of the ground following.

The halfe common foote.

This is the ground of the Arch triumphant of Pola.



The third Booke.

The fourth Chapter, Fol. 59

The measure of this present Arch is set downe before : in this side following , the particular parts shall bee shewed.

These great letters hereunder, stand in the frieze, marked Y.

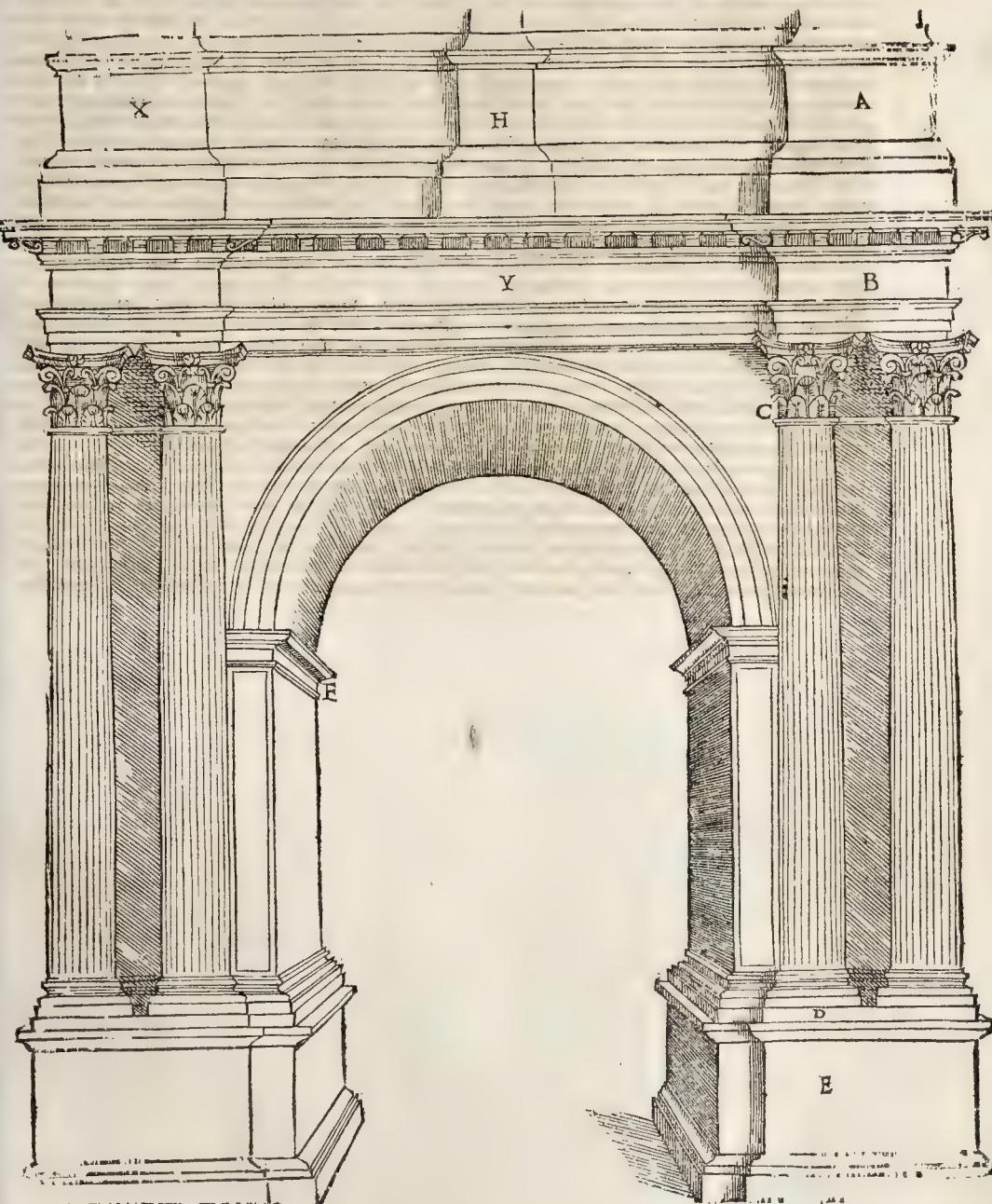
SALVIA. POSTVMA. SERGI, DE SVA PECVNIA.

These under marked, stand in the pedestals, marked X. H. A.

L. SERGIVS. C. F.
AED. II. VIR.

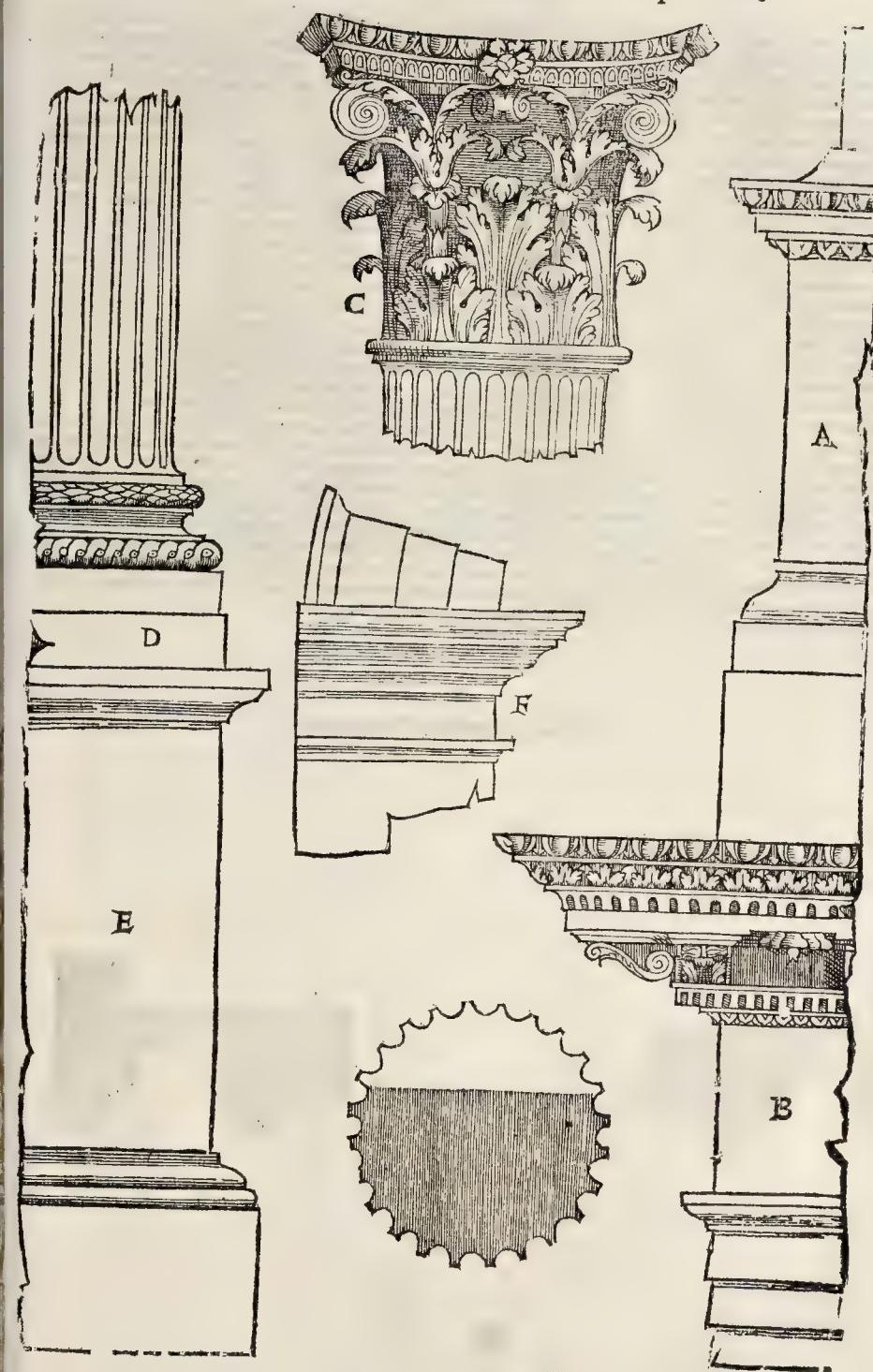
L. SERGIVS. L. F. LEPIDVS. AED.
TRI. MIL. LEG. XXIX.

C. SERGIVS. C. F.
AED. II. VIR. QVINQ.



Of Antiquitie

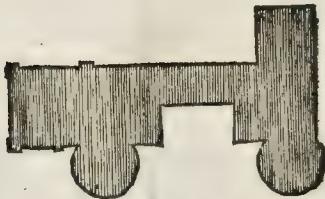
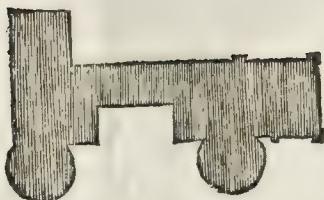
If the side before, I have spoken of the universall measure of the Arch triumphant of Pola, and have also shewed the figure thereof, and partly set downe some of the richest and fairest ornaments of the same: Now I will set downe the particular measures of the parts thereof: and first, I will begin with y^e nether parts, as that was placed first above the ground. The heighte of the Plinthus under the Base of the Pedestall, is one foot; although that under it there lieth another of much more height, but it is under the earth: the height of the Cimatic turned about above it, with the Astragalus, is 4.ounces: the flat of the Pedestall, is 3. foot high: the Cimatic above, is 4.ounces, & so much also is the under-Pie, above the Cimatic: the height of the Base of the Columnes, is 10. ounces, and is very well cut and graven: and although the forme is Dorica, yet the delicate worke thereof sheweth that it is Corinthian: the Columnes are fluted or chanched from the top to the bottom; and there are also many hollowings without the Pilaster, as the Figure hereafter dooth shew. The height of the Capital with the Abacus, is two foote and one ounce: the which Capital is higher then the thicknesse of the Columnae beneath. Nevertheless, it is very well, and sheweth pleasing to sight; it is also richly brought, as it is here shewed in the Figure thereof: and alwayes, as the Capital of Corinthia is in just proportion against the Column, I would think it better to the view of workmen, then if with the Abacus it had but the height of the Diameter of the Column: and although Vitruvius writeth thus (as I before said) yet may his text be falsified. The height of the Arch-rail, is one foot and one ounce: the height of the Frise, is one foote and two ounces: the height of the Cornice, is a foote and ten ounces: which Cornice is very licencious, although it be rich of worke because such richness of worke confoundeth it: but that which is most unseemly in it, is the Echine with the Drak above the Scima, a thing, in trouth, much baslyght: and that, which is more worthy laughter, is, that the said Echine in the upper part, is cut though, without being covered with any list, that it might not bee confounded with the water. But others hath alwaies borne licencious workmen, as there are yet in our dayes, who, to please the people, make much graving in their worke, without respecting the qualities of the stones, and will also in Dorica worke, which should bee fast and strong, vse much graving and cutting, as in Corinthia worke, which, by their folly, alwaies many ornaments. But wise and judicious workmen will alwaies vse Corinthisc Decour: and if they make worke after Dorica maner, they will follow god Antiquities: which, for the most part, agree with Vitruvius precepts. If they make any worke after the Corinthia maner, then they cover them with Ornaments, as that kind of worke requireth. This I haue set downe, to aduertise those thereof that know it not, for they that know it, neede not my aduise. Now to come to the purpose againe: Above this Cornice there is a Basement, which maketh out these Pedestals, the Plinthus under the Basement, which is there set against the profection of the Columnes. (for otherwise, in looking up, it wold darken the Base) is a foot high; above it standeth the Base, whereof the height is 10. ounces: the flat of the Basement, is 2. feet & 1. ounce high: the Cornice above it, is halfe a foote high; which Cornice is very scantly, and the parts thereof deuide themselves very well from each other, for that betweene the two carued members there standeth one playne above: the Cornice is that member of part, called Corona his, as I understand Vitruvius, whereof the height is 5. ounces. Above these there are some stones that shew to no end at all, but it may be thought, that some things stode vpon them: the height of these stynes is 10. ounces: the height of the Impost of this Arch is 10. ounces, the which Impost is very licenciously made: and although those 3. members one above the other, are divers, yet they are like each other in profection: and therfore in the worke they stand to no god effect: the other parts you shall know by the Characters in the great Arch.



Of Antiquitie

In Verona there are many triumphant Arches; among the rest, there is one Gate, called Castel Vecchio: the which, truly, is of good proportion: this Arch, as men conceare, was bought both before and behind, and also on the sides: it had two goings in, as you may perceave by the grounde whiche is yet faire, although I shewed but one side only. This building was measured by the same foot, wherewith the Arch of Poles aforsayd was measured. The widenes of this Arch is ten fute and an halfe: the thicknesse of the Columnes, is two fute and two ounces: the intercolumnes, are 4. fute and 3. ounces: the Plaster or Pillar of the Arch is 2. fute and 2. ounces broad. The thicknesse of the Arch in the sides inward, is 4. foot and an halfe: the widenesse of the Tabernacle betwene the Columnes, is 1. 2. foot and ten ounces: and thus much for the widenesse and thicknesse: but coming to the height, the Vale of the Pedestall of the Columnes together with the Pilasters, is one fute: are three ounces high: the flat of the Pedestall, is fourte fute, three ounces and an halfe: the Cornice is ten ounces and an halfe: the height of the Vale of the Columnes, is one foot: the height of the body of the Columne, without Vale or Capital, is 17. fute and thre ounces: the height of the Capital, is two fute, four ounces and an halfe. The height of the Architrave, is one foot and an halfe: the height of the Frise is one fute 7. ounces and an halfe: the height of the Cornice, is one fute and ten ounces: and a thought that in this Figure there is the Frontispice: yet you see it not in the Arch; for from the first Cornice bywards there is nothing at all: nev rthelesse, altho the wall is byt yare consumed yet you may se there some signes, wher by a man may conceare that the Frontispice bath bene there. The uppermost Cornice is not there, and therfore I set no measures, according to all Antiquities: but I have made one, with such meausure and signes, as my selfe woulde haue made it, h. ving for a common rule: that the uppermost thing stand the fourth part lesse then the nextermost this Cornice therefore shall be the fourth part lesse then that which stand vnder it, and is thus deuided: hat the whole height shoulde be set in fourte parts and an halfe: the halfe part shall be for the Abrazal with the list, and the fourth part shalbe for the Scima. The Proportion must be like the height, also shall this uppermost Cornice be made in manner aforesaid. Betweene the Columnes stand Tabernacles, wherein there were Images, whereof the widenesse is two fute and ten ounces: the height is seven fute, and the depth thereof in the wal, is one fute and t. n ounces: the height of thir Basement, is 4. fute, with the Vale and Scima the little Pillars on either side, are halfe a fute thicker: the Architrave is 7. ounces and an halfe: the Frise is 6. ounces high: the height of the Cornice without the Scima is 4. ounces: the height of the Tunianum of the Frontispice, is 8. ounces. Above these Tabernacles are small tabletts with other Cornices: the which tabletts are two fute broad, and hold one fute in heigh: the height of each Cornice is 11. ounces: the height of the opennesse of the Arch, although it be somewhat bigger belowe, is not twise higher then broad: for the widenesse thereof, is 10. fute and a quarter: and the height is 23. fute and an halfe. The Capital vnder the Arch, is as high as broad: the worke of this Arch is Composita, and bauely set out with Images of Marble and Copper, as you may perceave in the boord places.

This is the ground of the Arch following:



The third Booke.

The fourth Chapter. Fol. 61

This forme of the Arch Triumphant of Castel Vecchio in Verona, is made as it is here set downe: and althoough from the Frates vpwards, there are no signes of ornaments; nevertheless, it do stand so. And so, that the parts herofare so small that you can hardly understand them, in the next side they haue bee set downe in a greater and plainer forme. This Arch triumphant (by that which is found written within the inner parts thereof) by some is sayd, that Vitruvius caused it to be made: but I believe it not, and that for two reasons or causes. First, that I see not in the Inscription, that it saith, Vitruvius Polio; but it is possible that it was another Vitruvius, that caused it to be made. The second reason is this, that Vitruvius Polio, in his writing of Architecture, doeth utterly condemn and reiect Humiliates and Deniliates, standing together in one Cornice, and such a Cornice is found in this Arch. And therefore I conclude, that Vitruvius, the great and learned Architect, made it not: but bee it as it will, this Arch hath a good forme and proportion.

These letters are bver the Tabernacle in the Peristall.

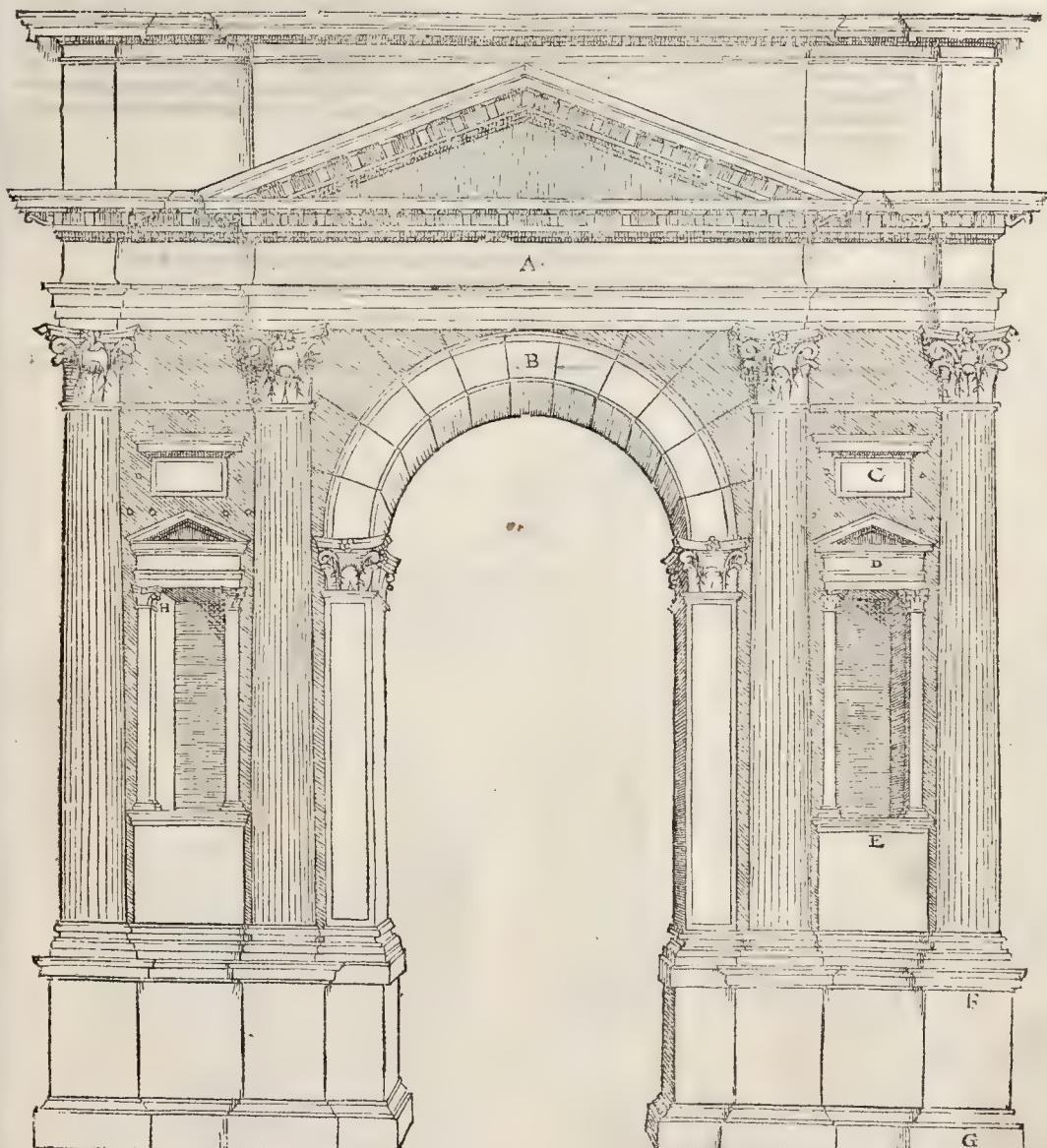
C. GAVIO. C.F.
STRABONI.

These letters are cut in the inward side of the Arch.

L. VITRVVIVS. LL. CERDO
ARCHITECTVS.

These letters are also in the Pedestall of the Tabernacle.

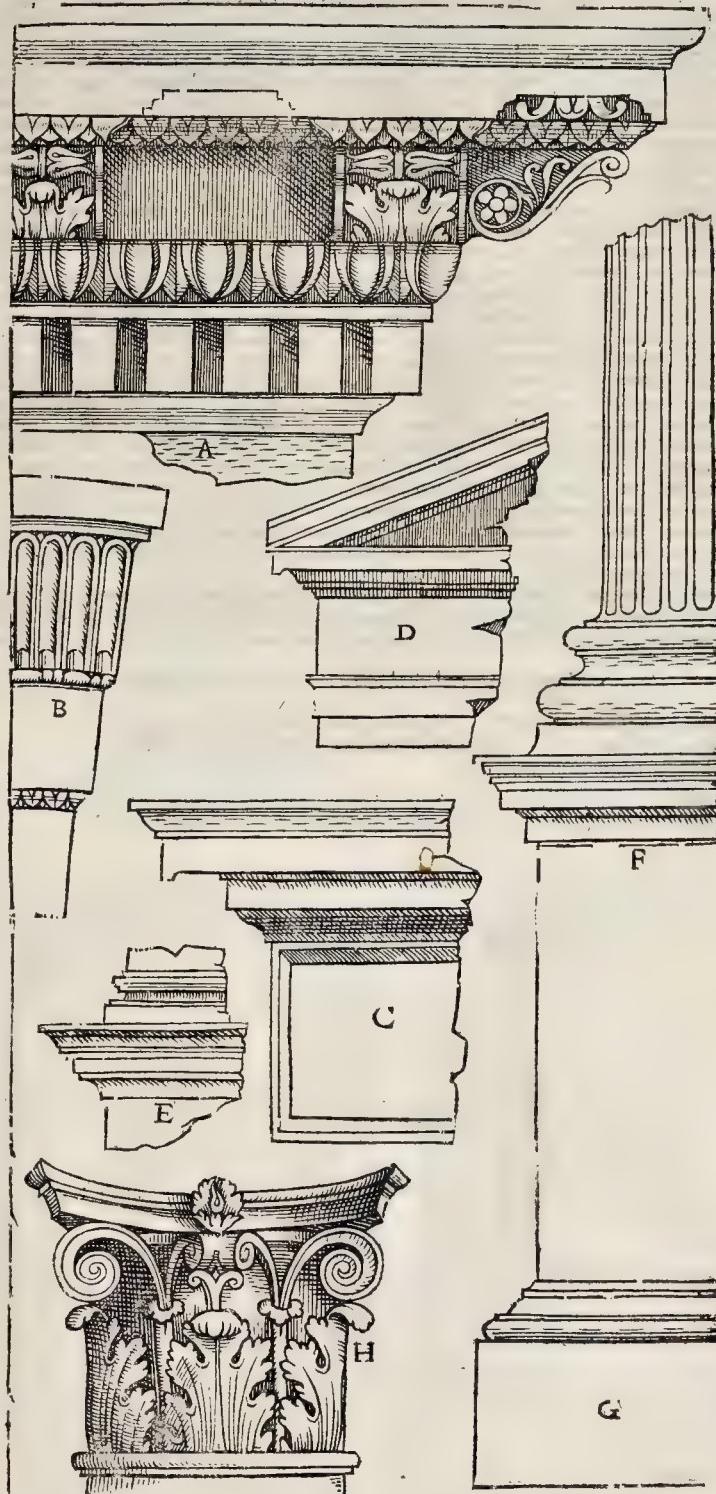
M. GAVIO.C.F.
MACRO.



Of Antiquitie

Because I haue not fully written the particular measures of the members of the aforesayd Arch, neither haue I shewed it in such forme that a man may conceare the particular measures: therefore you may see them here set out in greater forme, and in such sorte as they are: and first, the height of the Plinthus, vnder the Base of the Pedestall, marked G, is a foote and thare ounces. The height of the Base above upon it, is 6. ounces. The flat of the Pedestall, marked F, is 4. foot, 3. ounces and an haife high. The Cornice vpon it, is 10. ounces and an haife high. The Base of the Columnne, is one foote high. The Plinthus of this Base turneth into a Corona lis; which me thinkes, is very pleasant: for that I haue seen some Greke Pedestals so. The Columnne is sygeted, chanelled or hollowed, from the top to the bottom. The height of the Capitall of this Columnne, is one foot, 4. ounces and an haife: but the forme is no[n]e here, because it is shewyd in the beginning of the Order of Composita: which Capitall, in effect, is Composita, although the Arch may be wholly accompted to bee Corinthia: and this Capitall standeth in that place, marked C. Also, in the same place you se the Capitall of the impost of the Arch, which is marked with D. But the little Capitall of the Tabernacle betwene the Columnnes, is here marked H. And the Cornice also, with the Base, marked E, is that which is vnder the Tabernacle. The Figure C, is the table above the said Tabernacles, and the Figure marked D, is the Architrave, Frise and Cornice, of the Frontispicium of the Tabernacle. The Figure marked with B, is the wroke which goeth about the Arch: the Cornice marked A, is the principall Cornice aboue the Arch; the which, in effect, is very comely, and well wrought: yet it is vicious, as I haue often sayd; that is, the Buttles and the Dentiles therein are by Vitruvius rejected, with many strong reasons. But in this, many men affirme, that sithence Vitruvius time, many woskemen haue made Buttles with Dentiles, in most places of Italy, and there round about, so that now there is no question made thereof; but every man hath libertie to make that in his woske which he findeth and leith in Antiquities; whereunto I answe[re], that disp[os]sing the same, they haue proued their cause to be good. But if they will acknowledg[e] Vitruvius for a learned Architecto, as most woskemen affirme, then (reading Vitruvius with god judgement) they must confess and acknowledge, that they haue done amiss the rei[n].

The halfe of the lot, wherewith the Ichnographicie, and the Orthographicie, together with
the ornaments of this Building, are measured.



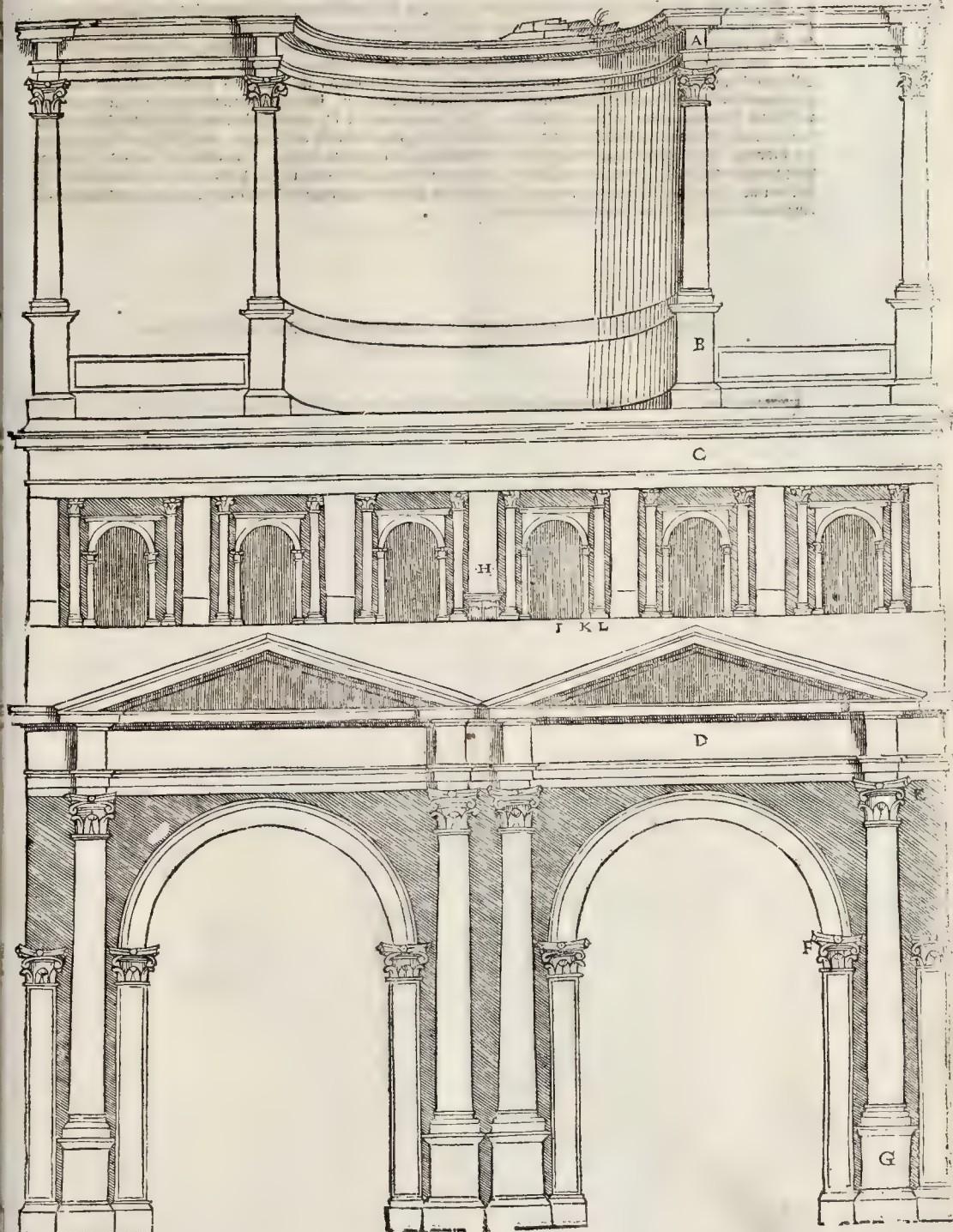
Of Antiquitie

In Verona, at the Gate Dei Leonii, there is a Triumphant Arch, with two like goings through, which I never saw in any other place besides, but many with 3. Arches: which building, altho' it hath the figure of 6. windows, yet go they not through, neyther yet very deepe in the wall: whereby you may judge, that some round Images stode in them, Above the first Cornice this building is hollow, in manner of a Nich or seat, but not very deepe in the wall, but yet with helpe of the proecture, or striking out of the Cornice, men might stand there to doe some thing or other, while the Triumphant lasted: but for that this concerneth the wozkeman very little, I will speake of the measures. And first, the opening of the 1. Arch is 11. foote wide, and 18. foote high: the Blocke bnter the Pedestall, is one foote high: the Vale of the Pedestall is 3. Dunces: the fist of the Pedestall is 2. foote and one Dunce high: and the Cornice is 3. Dunces: the height of the Vales of the Columns is 8. Dunces and a halfe: the height of the Columns, without Vales or Capitals is 12. foote and 1. thre part: their thicknes is 1. foote, 4. Dunces: the height of the Capitall is 1. foote, 8. Dunces: the height of the Architrave is one foote, 5. Dunces: the height of the Frise is one foote, 8. Dunces; and sommeh is the height of the Cornices: from the Cornices to the second Rofe is 3. foote and a halfe, & herein there are certayne Fauiles, whereupon Images ha stode, made fast to the 7. Pilasters, betwene whiche, little windows, beautified with small pillars, stand, but not much bearing out: the widenes of a window is 2. foote, 2. Dunces: their height is 4. foote, 3. Dunces: the height of the greatest Columnis is 5. foote, 4. Dunces, with Vales and Capitals which are flat, not not much rased vp. The height of the second Architrave is 6. Dunces and a halfe: the height of the Frise is one foote and a halfe: the height of the Cornice is 10. Dunces and a halfe: the Corona lies above the same Cornice, is 10. Dunces high. The Vale of the second Pedestall is one foote, the flat o. i. selfe is 3. foote, 7. Dunces and a halfe high: the Vale of the second Column is 8. Dunces: the height of the Columns is 8. foote, 3. Dunces and a halfe. The thicknesse of the said Columnes is 10. Dunces and a halfe: the height of the Capitall is one foote, one Dunce and a halfe: the height of the Architrave is one foote and ore Dunce: the height of the Frise is 1. foote, 2. dunces: the height of the Cornice is one foote, whereon there standeth some part of the wall, but a man cannot perceiue what it might be. This Arch is not very thicke, neyther beautified on the sides, for that behin this Arch there is another, standing so neare together, that a man can hardly goe betwene them both, & I will shew hereafter when I speake of the other figure: the windowes stand not in any good oder, but somewhat unsemely: for the 2. windows are not right in Perpendicular upon the sharpe point of the Frontispice, but some part aside, whiche leuyeth not well: and for that I could not endure such disorder, I haue placed them orderly. The Capitals of these Arches are part Composta, and part Corinthia, as hereafter I will set downe in Figure.

Louing Reader, Corotus, a Painter in Verona, hath counterfeited this Arch: the Cornice bnter the Timpanum is not there: for he placeth there certayne order of figures resting upon the Architrave: the which Architrave, you must understand, is betweene the 2. Columns ouer each Arch, and is somewhat flat, because of the wytling soifwing.

Under this Arch, on the right hand, these letters following stand.

T. FLAVIVS P. F. NORICVS, IIII. VIR. ID. V. F. BAVIA. Q. L.
PRIMA SIBI, ET POLICLITO, SIVE SERVO, SIVE LIBERTO MEO,
ET L. CALPVNIO VEGETO.



Of Antiquitie

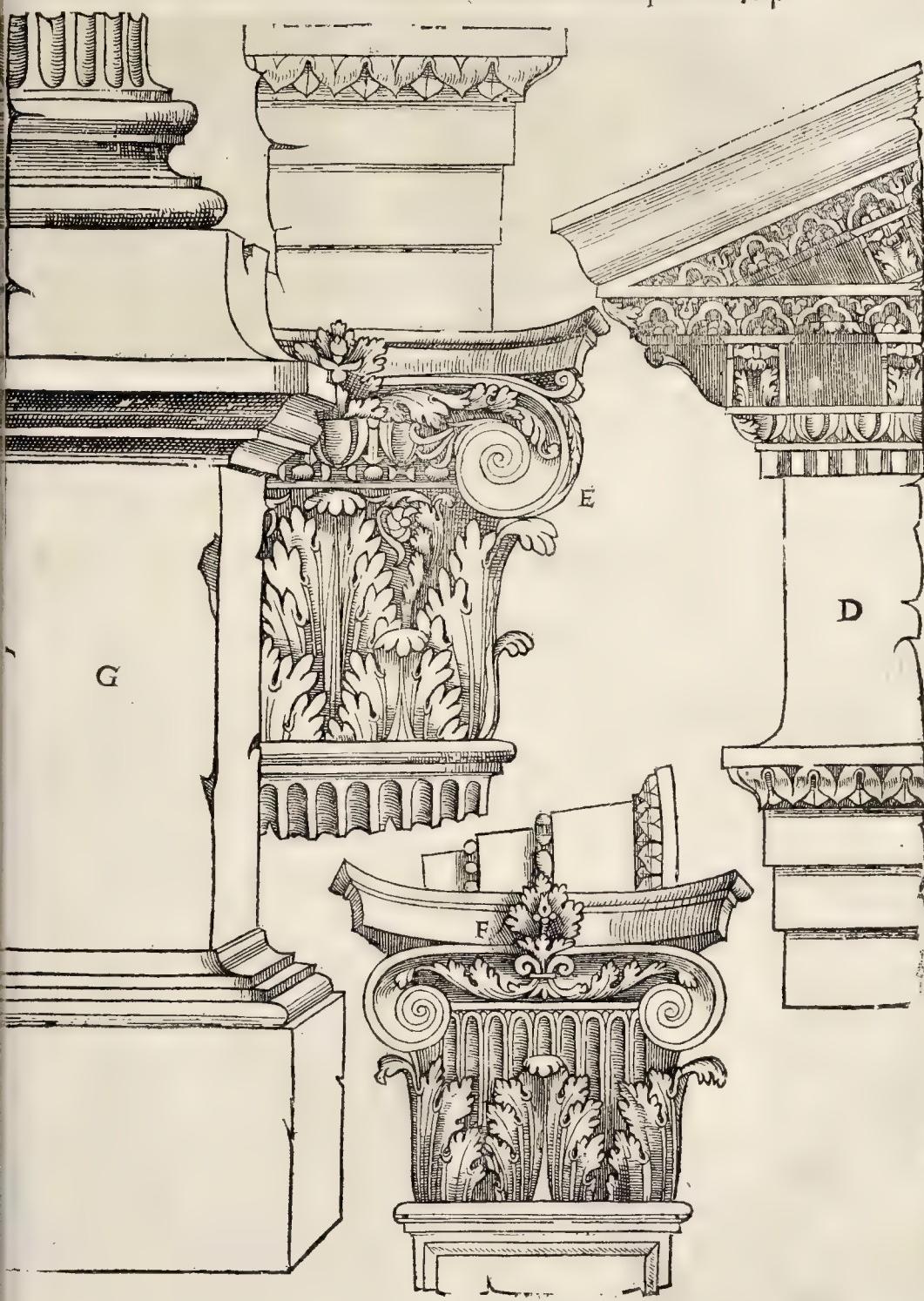
Here before, I speake of the uniuersall measure of the sayd Arch, and therento set downe the forme, according to the proportion of the same, but cannot gine perfectly the particular parts in so small a forme. Of which members, for that there are diuers ornaments in them, I will in this least declare them: touching the height and thicknesse, I will speake no more; for I haue done it already: but I will shew whiche they are. The Figure marked G. is the first Pedestall, with the Bases, and the beginning of the Columnes, the which is hollowed: all the members are proportioned according to their greatnessse. The Capitall marked E. having the Architrane vpon it, followeth vp on the first Columne, as the hollowing sheweth. The Figure marked D. is the Architrane, Freke and Cornice together, whiche stand above the first Columne: whiche Comice, by the authourite and example, which is by me in many places alledged, the iudicious Reader may know, whether they be erroneous or god. The Capitall marked F. is that, whiche upholdeth the Arch vpon the foreshowre Pillars; these two Capitalis are called, Latine wroke, and very fayre. I will not, as I haue said, speake of the measures, for that this Figure is proportioned after the principall, and with great diligence transposed from the great into the small.

The halfe of the common sorte, wherewith the abovesayd double Arch, with the following ornaments, is measured.



The third Booke.

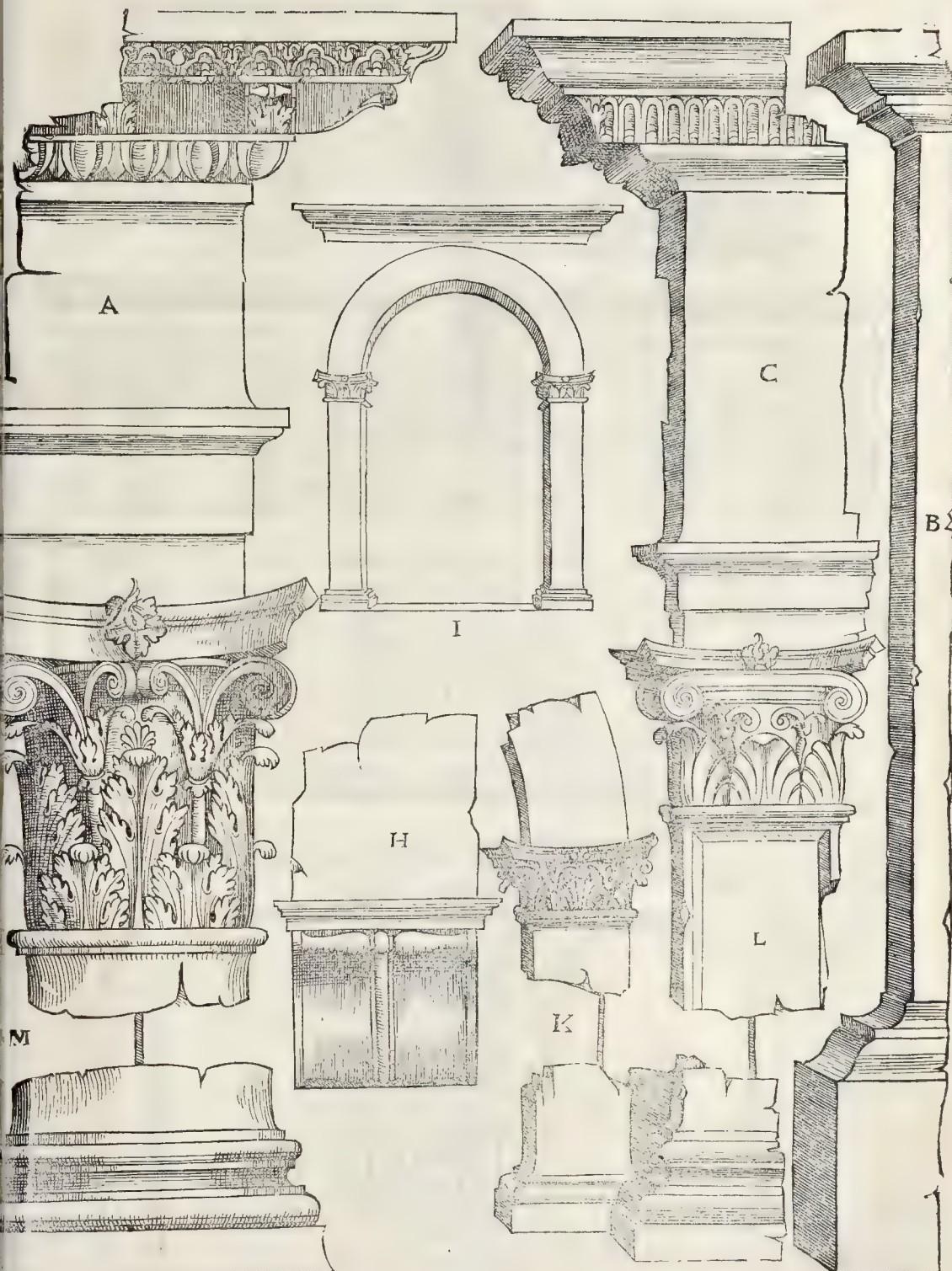
The fourth Chapter. Fol. 64



Of Antiquitie

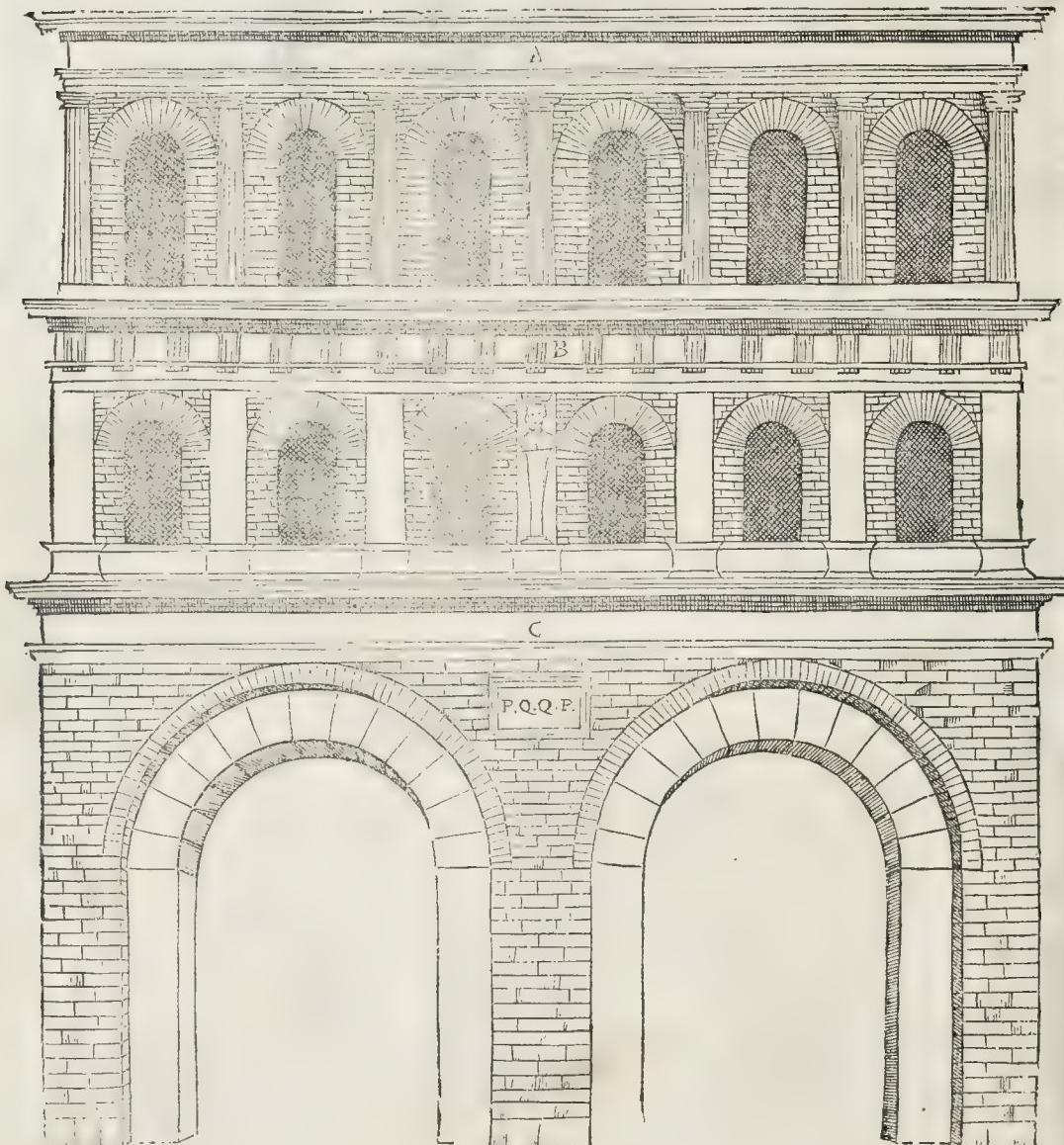
As I layd before, the Arch is very rich of ornaments, and among them, some very faire and perfect; some also very vicious & ill made: and in truth, I finde nothing that moare mislike me, then the Cornice marked D. in the other least, for the reasons before shewed: but all the rest before set downe are of good proportion, as well the workes as the Cornices. And as the parts of the first story are, so are these following of the second story. The Nutiles marked H. are in the beginning of the second story above the Frontispicie: vpon which Images (as I have declared) there were 3 images fastened against the flat Pilasters. The window marked I. is the forme of one of the Windows with the Cornice vpon it, one therfore iust of his measure. That Capitall and the Base marked K. is of the same windows, shewed in greatest forme, that the members may be the better understand. That Base and Capitall marked L. is the little Pillar betwene the Pilasters and the window: and in truthe, these two Bases, that is, that of the greatest of the small Pillars ioyned with the lesser, the wozkeman was very iudicious to accord or agree the one with the other, that the greatest Pillar shold haue his due Base, and the lesser shold also haue his leste Base, according to proportion, which I command much. The Architrave, Frise and Cornice, marked C. sheweth that of the second story, aboue the small Pillars: this Cornice is very fairely, and not confused with cutting. The Pedestall marked B. sheweth that of the last story, whereof the Base marked M. doth rest: also the Capitall which standeth above, is his companion, and is truly Corinthia, the which is confirmed to the principal, for wozke and fashon, and in my opinion, very seemely. That Architrave, Frise, and Cornice, marked A. sheweth the last Cornice: the Architrave is not vicious, because it hath only two ffacies; for if it had three, it would, by the fare distance, stand cumbered: the Cornice with the Nutiles, liketh me well, because it hath no Dentiles; and is also well deuided with members: neither is it confused with much graving, but hath a seemely Prolecture, whiche haneth vp the heighth thereof a little.

The halsc of the common foot.

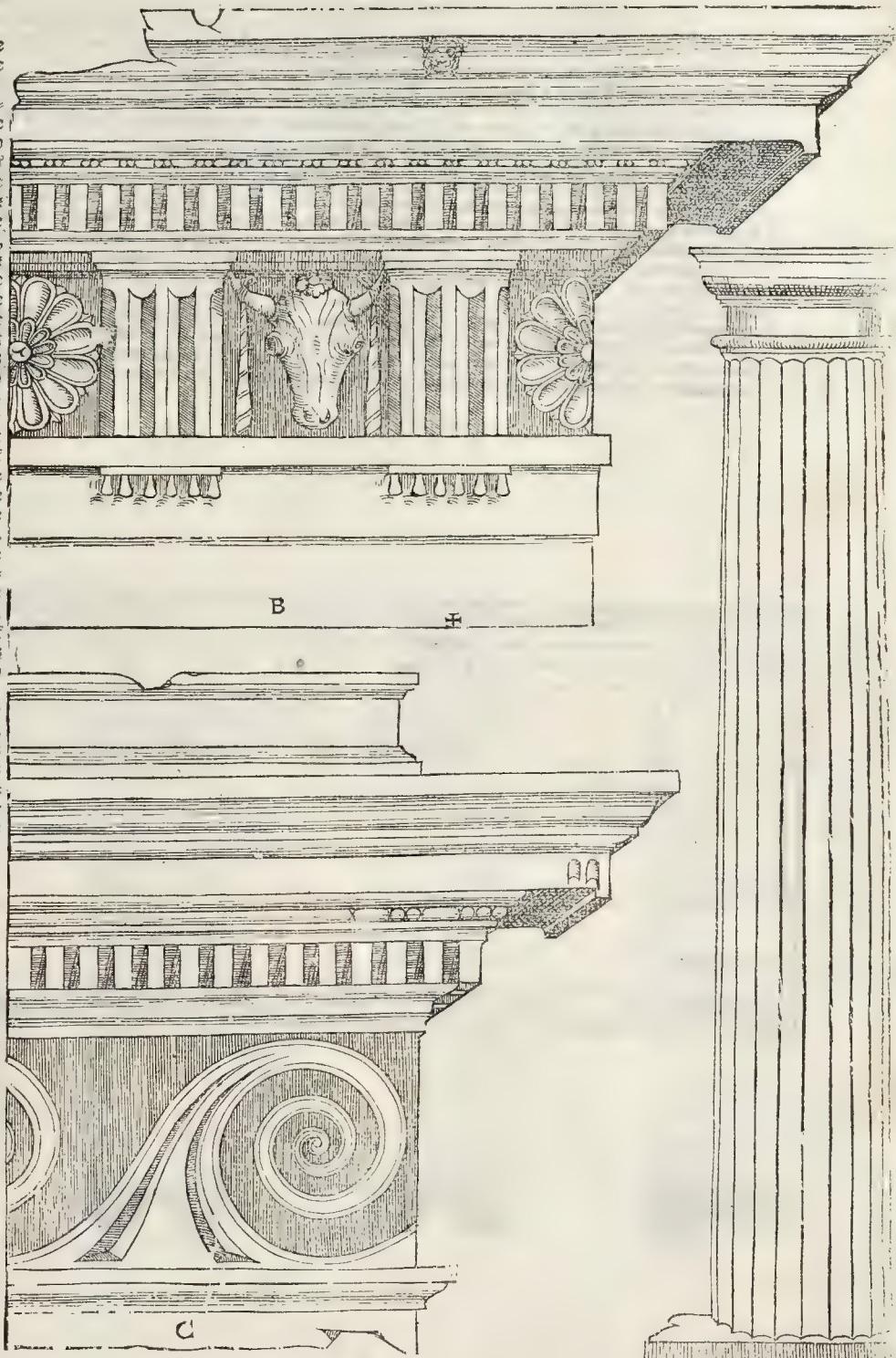


Of Antiquitie

This Arch triumphant was made before the Arch aforesaid, which the table sheweth, wherein there standeth P. VALERIVS. Q. CECILIVS. Q. SERVILIUS. P. CORNELIVS. it is thought it was set up in the time of Hanibal. This is measured with the same measure that the other is: the widnes of each Arch is 11. footes: the height is 17. foote: the Pilasters of the Arch are one foote, 8. ounces broad: betwene the 2. Pilasters are 5. foote, 4. ounces: the stee, eche holdeth 2. lot. The Cimatic under the C. in place of an Architrave, is 6. ounces and an halfe: the height of the Frise, is one foote, 7. ounces and an halfe: the list above the Frise is 2. ounces: the Cimatic under the Dentiles, is 4. ounces and a quarter: and the Cimatic above it, is one ounce and an halfe. That Atragall is one ounce. The Cimatic under the crotone, is one ounce and a third part: the crotone is 3. ounces and an halfe high: the Cimatic thereto, is 2. ounces and a quarter. The Scime is 3. ounces and an halfe high: but the list is 2. ounces: the Projecture of all, is as much as the height. The Eafement above the Cornice, is one foote, one ounce and an halfe in height: the thicknesse of the hollowed Columnes, is 1. foote, 3. uncies: the height without Capitals, is 7. foote, one ounce and an halfe. The Capital is 10. ounces high. This Column hath no Base nor Cuynthe. Caretus, who also counterfeited this Arch, saith but foure places where Histories are grauen, and 5. Columnes in this third story: in the second story but 4. windowes, and 5. Pilasters: and above them, 5. Columnes: the third Cornice you cannot come unto.

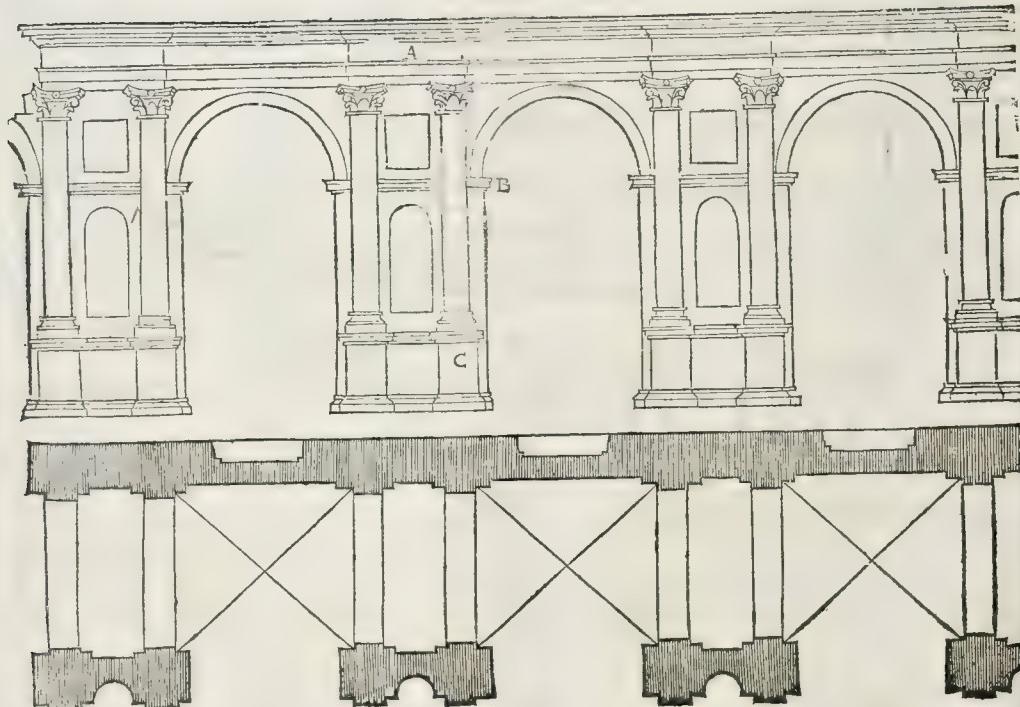


This figure
 B. is the
 Architrave,
 Frese & Cor-
 nice above the
 windows, and
 the height of
 the first facie
 is 8. ounces, &
 a 3. part. The
 second facie,
 is 9. ounces &
 an halfe. The
 Semas thic
 ounces. The
 Frese is 1. foot
 and 4. ounces
 high: the breadth
 of the triglyphs
 is one foot: the
 litle therabout
 is a 3. part of
 an ounce. The
 other above
 that, is 1. ounce
 and a 4. part.
 The Cimatic
 under the Den-
 tile, is 2. ounces
 and a 4. part.
 The height of
 the Dentile is
 4. ounces and
 a 3. part. The
 Carel above it,
 is 1. ounce.
 The Astragals
 are 3. quarters
 of an ounce: the
 Cimatic above
 it, is 1. ounce
 and a quarter:
 the height of the
 Corona is 4.
 ounces: the Ci-
 maty is 2. ounces:
 the height of the
 Seme is 4.ounces: the
 litle is 2. ounces
 & an halfe: the
 Protecture of
 all, is like the
 height: the
 height may be
 call'd Dorica,
 only the grand
 Astragal: but
 it was a toy of
 the wozier-
 mans bauine.
 Many other
 things are in
 Verona, where
 of I will not
 speake, because
 they are very
 licencious; &
 specially the Arch triumphant called Dei Bucari, because it is barbarous work:

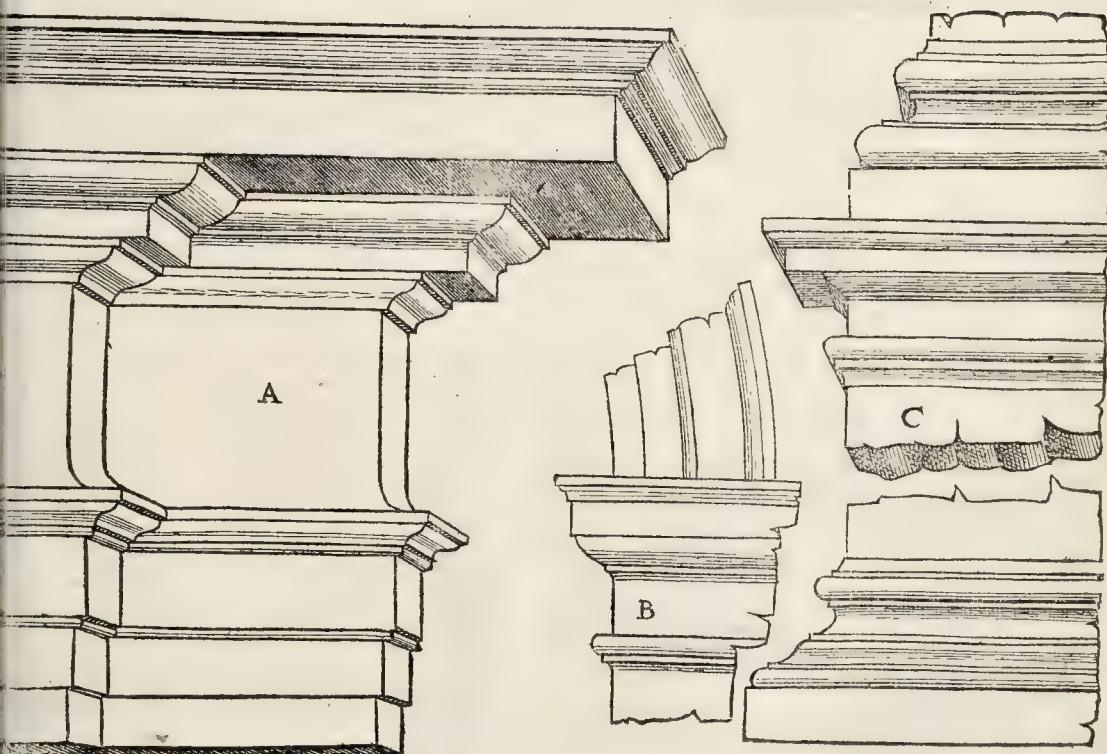


Of Antiquitie

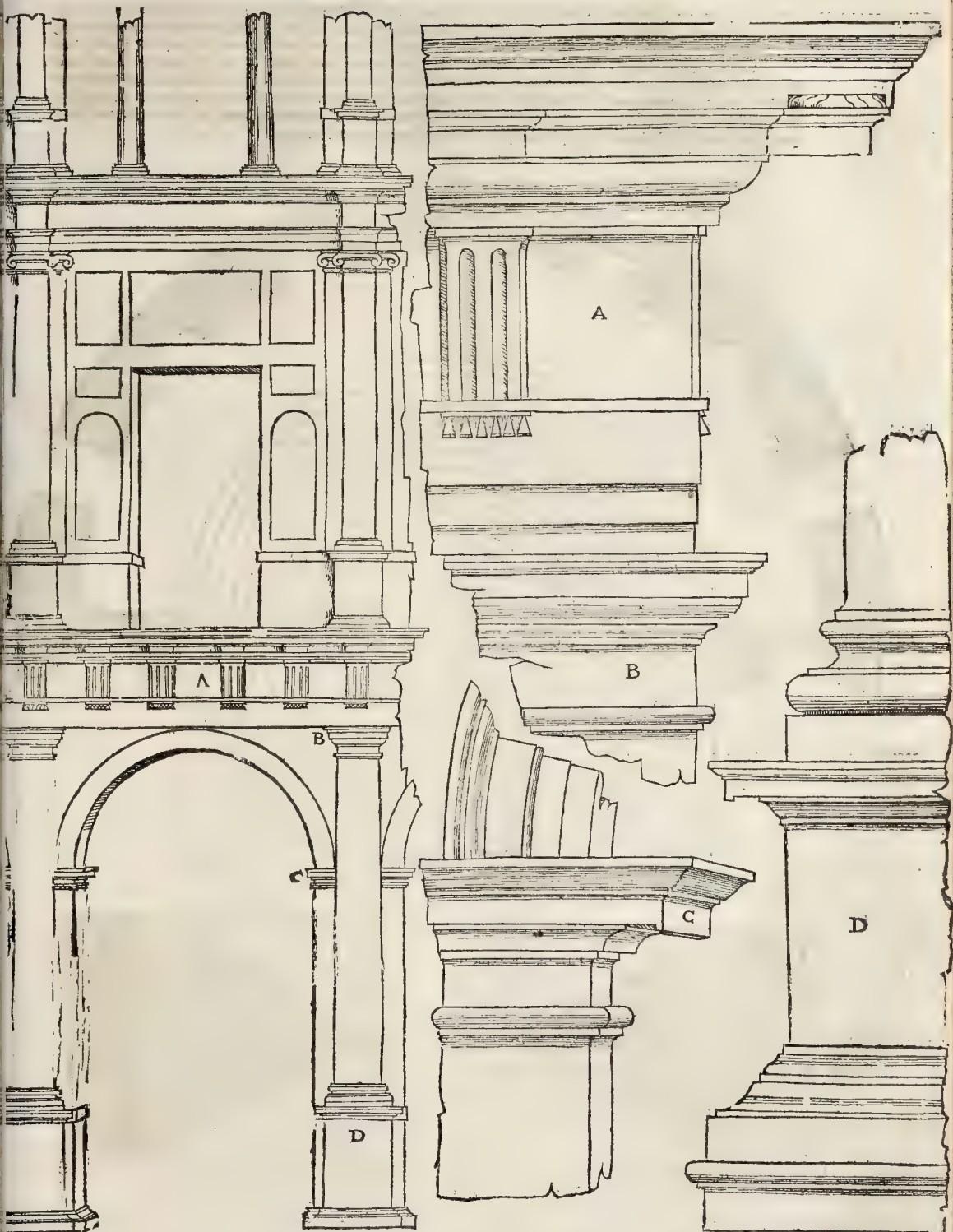
Having spoken of many Antiquities, and placed them in Figure; it is requisite that I also shew some of those that were made in hese dayes, and specially, of Bramantes worke, althoough I have not altogether omitted it, having shewed the wonderfull worke of S. Peters Church, and other things belonging to holy Temples. And in truth, a man may well say, that he restored god and perfect Architecture, as yet, by the meanes of Julio P. M. many faire pieces of wo:ke were made by him in Rome, do wittesse; of the which, this set here, is one: this is a Gallery made in Belvedere, in the Popes Court, wherein are two faire things to be seene: the one is, the strength thereof; the which, for that the Pilasters are of so great bredth and thicknesse, will last, while the world endureth: the other, for that there are so many accompagments so well set out, with good invention, and excellent proportion: this worke is measured with the ancient Palmre. The bredth of the Arches, is 18. Palmes: and so much are the Pilasters: the bredth of the Pilasters is deuided into 11. parts: one part on eþher side of the Pilaster, which beareth the Arch shall have, which is two parts: other two parts shall be ginen unto one Column, that is 4. parts: 2. parts shall be ginen to the little Pilasters of the Niches, or hollow seats, and 3. parts to the Niches themselves: so are the 11. parts distributed. The height of the Pedestals shall be halfe the widenesse of the Pilasters. The height of the Base of the Pedestals, shall have one part of the beforeþaid 11. parts. The Cornice is the 9. part leſſe then the Base. The height of the Columnes, with Bases and Capitals, are of 9. Diameters, and thereunto also the seventh part. The Base is halfe the thickenesse of the Columnes. The Capital is of the same thickenesse and the seventh part for the Abacus. The height of the Architrave, Frise and Cornice, is as much as the Pedestall without his Base. And this height is deuided into 11. parts, four for the Architrave, 3. for the Frise, because it is ungraven, and 4. for the Cornice, as the halfe Circle of the Arch is drawne; then the heights of the lights will be doublē after that, the imposts being drawne in their places, the which are of halfe a Columnē thicke, and so the Niches or seats, and the Quadzans aboue them, haue their certaine proportion.



Besayle I could not (by reason of the smalnesse of the Figure) perfectly shew the parts of the Gallery aforesaid; therfore I haue shewed them hereunder in greater forme: the part C. is the Pedestall of this Gallery, and upon it the Base of the Columne standeth proportioned according to the great: the part B. sheweth the impost of the Arch, with a part thereof. The Figure marked A. sheweth the Architrave, Frieze & Cornice above the Columnes. The generall measures, touching the height, are already shewen, therfore not to be mentioned againe: for they are proportioned after the great. In this Cornice the wōkeman was very indiscons, that he suffered the Corona to go through unbroken; and suffered the other parts of the Corona to beare outwards, which is very seemly, and the crowne the stronger, and kepereth the whole wōke from water: with which intention, the wōkeman may helpe himselfe in diuers accidents; for the reaching out of Cornices stand not alwayes well, but in some places well, and in some places ill; and the bearings out untolerable, where the Columnes on the sides haue no Pilasters: of these bearings out, I will say more in the fourth Booke, in the handling of soure manner of Symmetrie of Columnes.

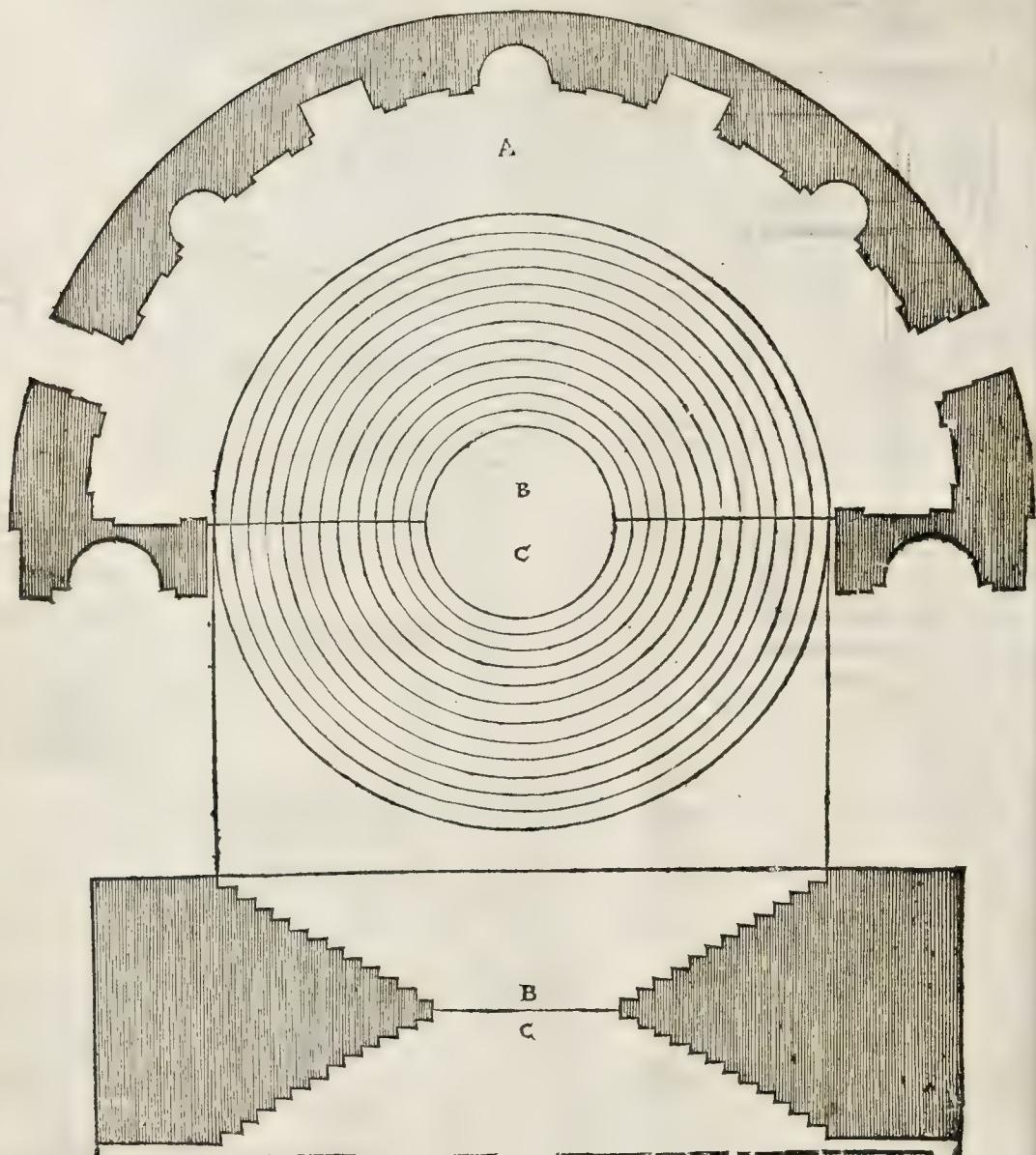


At the leaste before, I shewed a piece of worke of Bramantes making: and now I will shew another of his workes, from whence a wise workeman may helpe himselfe much, by meanes of the divers and sundry ornaments that are in it. In this Gallerie, the workeman would shew thys Stories or orders one aboue another, viz. Doxica, Jonica, and Corinthia: and in truthe, the orders were faire, well set out, and placed: notwithstanding, that the Pilasters of the first Story or order being Doxica, were somewhat to weake, and the Arches too wide, to the proportion of the Pilasters; and therewith the weight of the wall of the Jonica order standing vpon it, was an occasion that it was broken, ruined and decayed in short tyme. But Balthazar of Scere, a skilfull workeman, repaired the decayed ruines, making crenell Pilasters, with under-Arches: therefore I haue said, wise workemen may learne of this building, not onely to imitate faire and well made things, but also to beware of errours, and alwayes to consider what wrong the nethermost Story is to sustaine: therefore I counsell a workeman rather to be timorous, then over-bold; so if he be timorous, he will alwayes chuse the surest way, and make his wroke with consideration, and will use counsell, yea of such as are lesschillfull then himselfe, of whom sometime men often learene: but if he be high-minded, and trusteth to much to his owen shill and knowledge, then he will scorne another mans counsell, whereby oftentimes he deceyveth and ouer-shaketh himselfe; so that oftentimes his wroke falleth out badly. Now I will turne to speake of this Gallerie, and let come some notes of the proportion thereof. The widenesse of the Arch shall bee deuided into eyght parts, wherof thys parts shall be so; the bredth of the Pilasters, and the height of the Arch shall containe 6. of such parts. The forepart of the Pilasters shall be deuided into fourte parts, wherof two parts shall be for the Pilasters of the Arches, and the other two shall be for the thicknesse of the Columnes: the height of the Pedestals shall containe halfe the widenesse of the lights: the height of the Columnes shall bee eyght parts of their thicknesse, with the Bases and Capitols. The height of the Architrave, Frise and Cornice, is a fourth part of the length of the Columne. The second story shall bee lesse then the first by a fourth part, viz. That from the Pavement of the Doxica story, to the highest of the Cornice, shall be deuided into 4. parts, and 3. of them shall be for the whole story of the Jonica wroke, and so shall all the parts particularly bee lessened in themselues a fourth part. The like also shall be done with the third story, which is Corinthia, in regard of the second order, although it standeth not here, because the Figure is drawne to great: but not to put the Reader in a maze or doubt at the Columnes which stand here in the middle, as dousous to know how they end at the top; you must understand, that you shall finde such intention in the fourth Booke, in the Order of Doxica in the side H 2. that althoughe that those Columnes are Jonica in the sayd Booke, notwithstanding, you may make them Corinthia. And that the workeman might the better understand the members and Cornicements of this wroke, I haue shewed them in greater forme, and proportioned them according to the principall: I speake of the members of the first story, for a man could not easilly come to measure the other.



Of Antiquitie

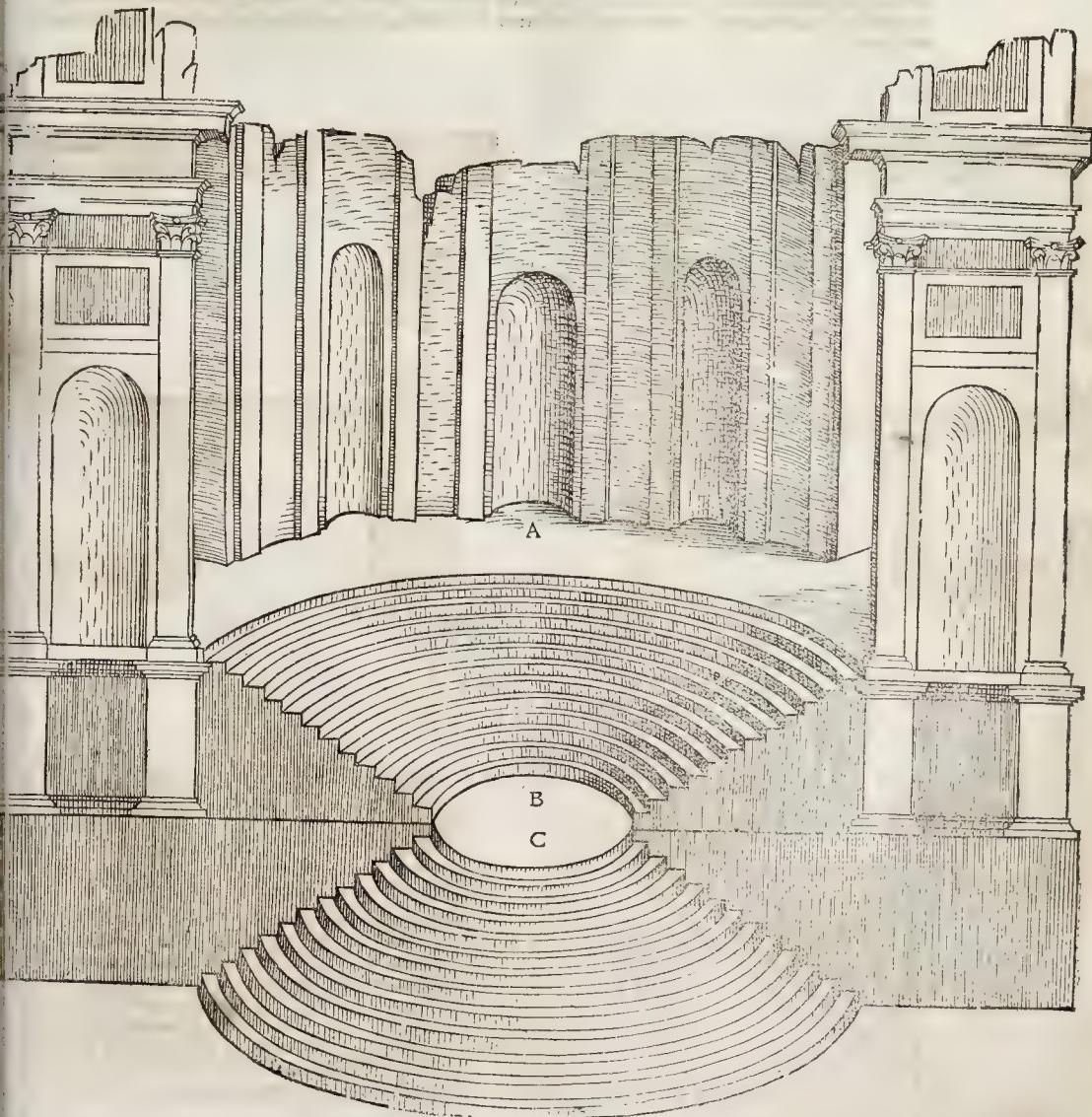
AT Belvedere, at the entry of the Popes Court, through the Gallerie, which I have set downe before, for the places alwayes goe vpwards, there is a going vp which is very large: at the head wherof you come to a plaine, which hath the forme of a Theater; the ground whereof is shewed vnder this: and thereto I have set the Profill, that you may understand it. Herre I haue kept no account of the measures, desirous onely to shew the intention of the staires, and the halfe Circle as it standeth. This halfe Circle is very much elevated from the Court of the Popes house to the Palace-yard: and behind the halfe Circle, you find a great playne with large appertements; at which place, you goe through the two Gates, which you see in the sides of this halfe Circle; in which places there are many faire Images, and among the rest Laecon, Apollo, Tyber, Venus, Cleopatra, and Hercules.



The third Booke.

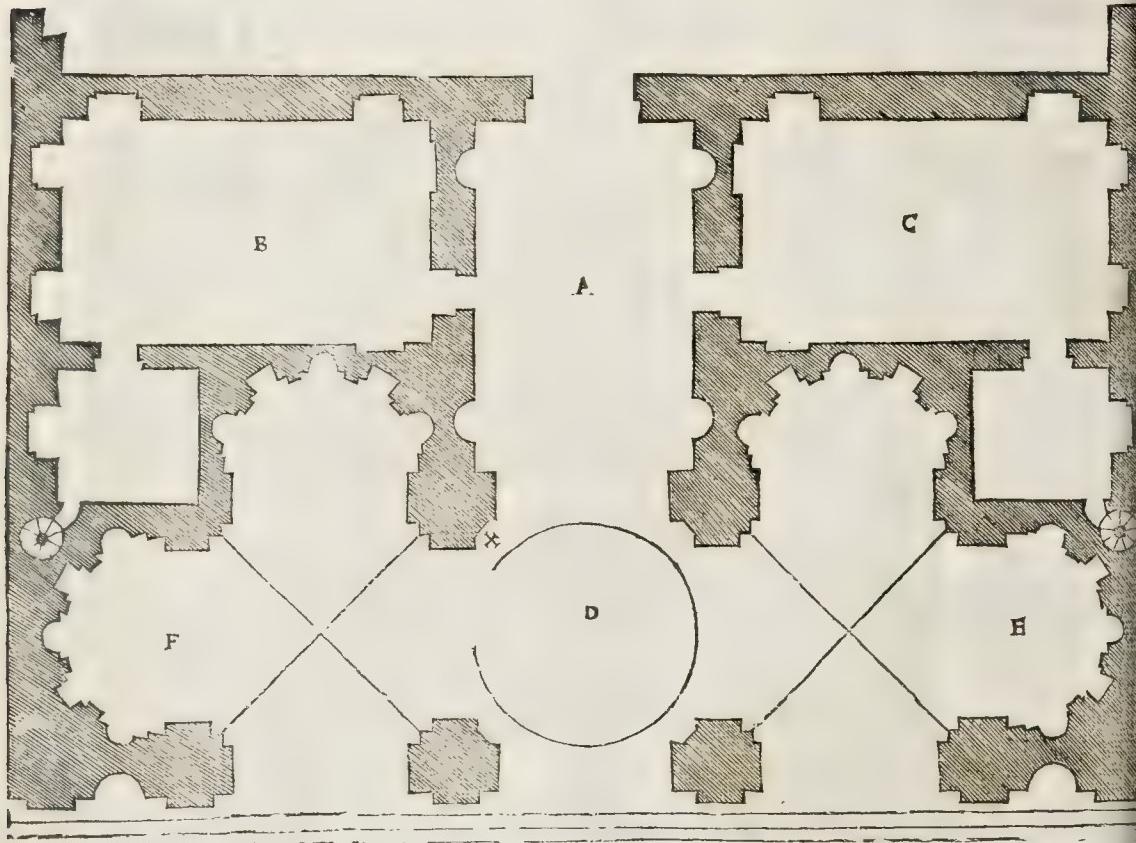
The fourth Chapter. Fol. 69

This is the Description of the ground shewed Folio 69. and as I haue sayd, I will not speake of the measure thereof, but only of the invention: and although that here on either side, only one Pilaſter, with his Columnes, is shewed, yet is it not unlike ſome Galleries, whereof I haue ſpoken before, and that appeareth by the double Columnes, together with the Niches or hollow ſeats, with the Quabzans aboue them. In Belvedere there are many other things, which I haue ſhowne, & among other things, there are wonderfull winding Stairzes, in the ground whereof, there standeth a Fountayne, flowing exceedingly with water, the which going vp is all full of Columnes in the innermost part: which Columnes are of ſome Oders: viz. Doxica, Ionica, Corinthis, and Compoſita: but that which is moſt wonderfull and ingenious, is that betweene one and the other Order, there is no diſference or diſtance, but men goe from the Doxica to the Ionica, and from the Ionica to the Corinthis, and from the Corinthis to the Compoſita, with ſuch cunning, that a man cannot perceiue where one Order endeth and goeth into the other: ſo that I am of opinion, that Bramante neuer made a fairer nor costlier piece of wo:ke then this.



Of Antiquitie

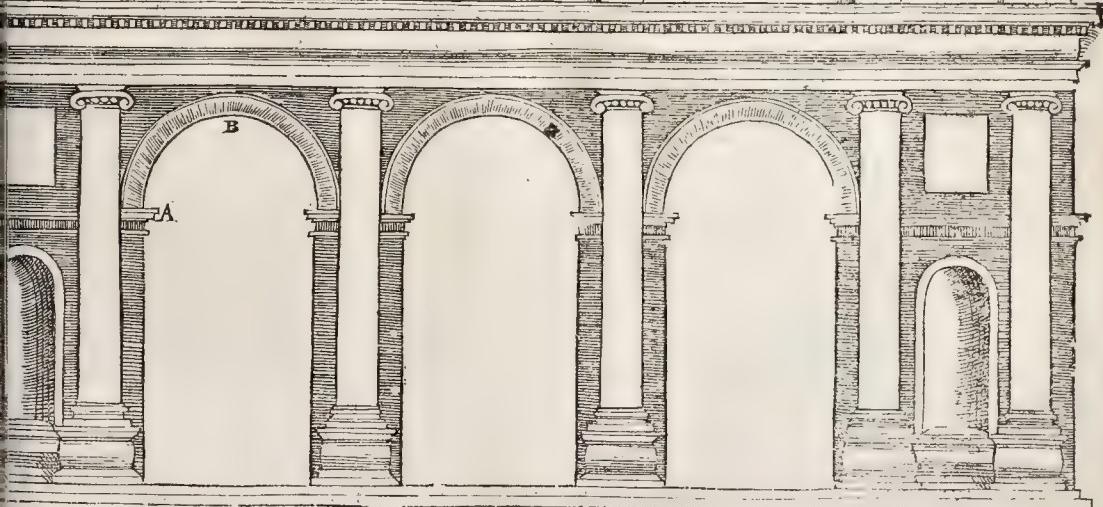
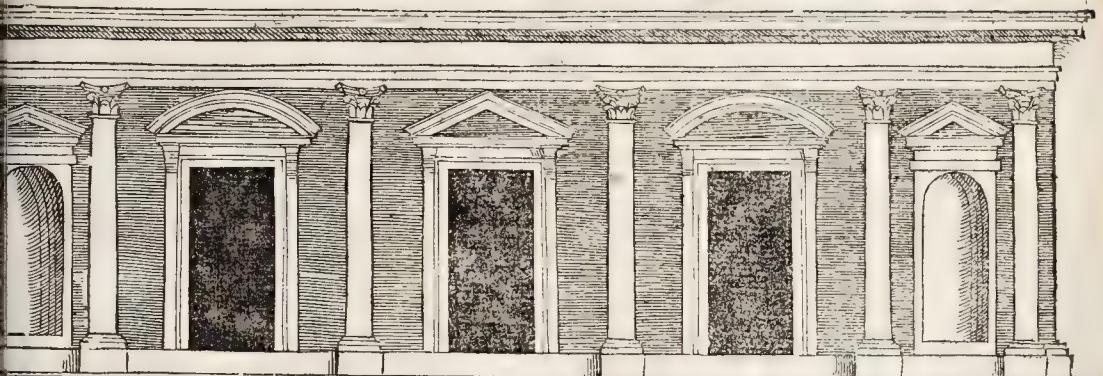
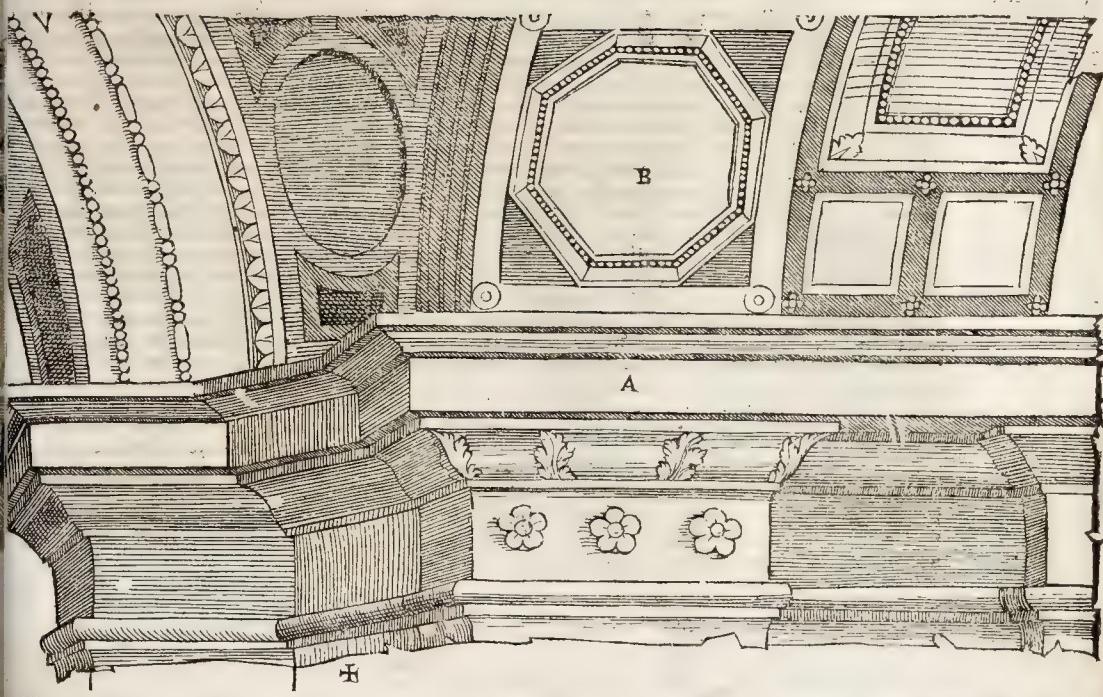
VWithout Rome, at Monte Mario, there is a very faire place, with all thirgs belonging to a place of pleasure; of which particular parts I will rather restraine to speake, then not shew them sufficiently, onely I will speake of a Gallerie, with the Facies thereof, made by an excellent workman Raphael Durbin, who hath made divers appertements and beginnings to other workes, as the Com: till, although that it is four esquare, yet he had fashened it round, as the foundation partly sheweth. That Uxibulum marketh A, and the two places, B. and C. stand not in such forme, but I haue placed them there to fill vp the ground: for the part C. endeth in an hill, as also the part E. but in the other side of the Gallerie marked F. there is no halfe Circle, and that was left out, not to pinch some of the appertements, but to accompanay other members by it. The order of this Gallerie is very faire: the roose whereto is concordantly altered: for that the middle part is with a round tribune, and those two on the sides are crose:wise. In which roose, and also in the walles, Ian van Vdenen hath made wonderfull great pieces of paynted worke: so that regarding the faire and excellent workmanship of Architecture, with the beautifying of paynting, together with divers ancient Images, this Gallerie may well be called, one of the fairest that euer was made. And whereas it is spoken of an halfe Circle which doth not answer the rest, neither the workeman not willing to leave it undecked or unfurnished, his Disciple Iulio Romano, in the Facie therof, paynted the great Spant Poliphemus, with many Satyres round about: which worke, Cardinall de Medicis, that after was Pope, by the name of Clemene, caused to be made. The measure of this Gallerie I will not set downe, but the intention shall suffice the workeman, so that all things are proportioned according to the great; and hereafter you shall see it made by sight, together with the Facie of the Gallerie, but the Pictures or hollow seates on the sides are not there.



By this part following, marked B. A. you may conceiu the roose of the aforesaid Gallerie, the sayzenesse whereto consisteth much in the corner marked X (to which you may understand also the thre others, being well placed) and shew well in the bearing vp o. the tribune in the middle, going alwyses binding with the duplication of Pillars, to each Facie of the Pilasters: which Pillars, in regard the Cozonas remainyng whole, make not the Pilaster shew bare, but rather with this kind of Plaster int. the Pillars, make a large fasing upwaros, and stande (neverthelesse) in manner and place o. a stane Pillar: for the Hale of the said Pillasters follow also. And so, hat in the Figure following in the Pilaster, there is but one Pillar with space shewed, yet to make it better to be understand, is, that each Facie of the Pilasters within the Gallerie is to be divided into thre, of the which a man may make two flat Pillars, and at the corner one Intercolumnie: so that (as it is saide, although there are two flat Pillars with one Intercolumnie, yet, altogether, it is but one Pillaster.

The third Booke.

The fourth Chapter. Fol. 70



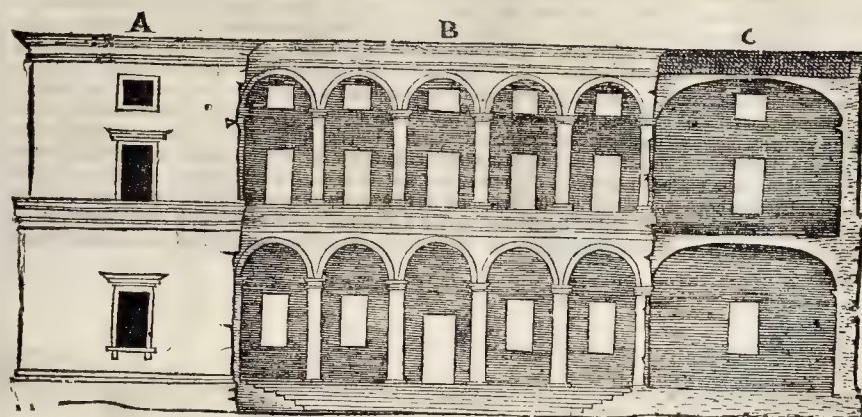
Of Antiquitie

A mong other Cities of Italy, Naples is called, La Gentile, and that not onely in respect of the great Barons, Lords, Earles, Dukes, and great numbers of Gentlemen therein, but also, because it is so well furnished with stately houses and Palaces, as any other parts of Italy. And among other pleasant places that are without the Citie, there is a place calleo Poggio Reale, which King Alphonsus caused to be made for his pleasure, in that time (then most fortunate) when Italy was in peace, and now unfortunate, by reason of the discords therin. This Palace hath a very faire situation, and is well denideed for Roomes, for that in each corner thereof might bee lodged a strong company of men: in the middle there are sixe great Chambers, besides the Roomes under the ground, together with some secret Chambers. The roome of this faire building in the ground, as also, the building that standeth bypaight, is here set downe in the next leafe: the measure thereof I set not downe unto you, onely, because I will shew you the invention: for a Workeman may imagine of what greatness he will haue a Chamber, being all of one greatness; and then from those Chambers he may imagine all the measures of the rest of the building: which building the Noble King used for his pleasure, because men accustomed to dwell in the Countrey in the Sommer tyme. The Court of this Palace is compassed with double Galleries: and in the middlemost place, marked E, men go downe a payre of Staires into a faire eating place, in which place, the King and his Lords used to banquet and eat at pleasure; in which place he caused certayne secret places to bee opened, whereby in the twinkling of an eye, the place was full of water, so they late all in water: likewise at this Kings pleasure, all y^e water booyded out of the roome againe, but there wanted no shiftes of clothes to put on, ne^r y^e rich and costly beds for them to lye in, that would rest themselves. O voluptuous Italians, how are you impouertised by your discords! I will not speake of the most beautifull Gardens, filled with all kind of floweres, with diners compartmentes of the Orchards and Trees of all kind of Fruits, with great abundance of fish ponds and Fishes, of places and cages of diners Birds both great and small, of faire stables, filled with all sortes of Horses; and of many other faire things, which I will not speake of, for that Marcus Antonius Michaeli, a Gentleman of that towne, been learned in Architecture, hath done it, and hath written of it at large in a Latino Epistle, which helte to a friend of his. But to turne againe to the parts of the said Palace, which is right fourre square, it is within Galleries round about, one above the other: in the fourre Corners, within the thicknesse of the walls, stand the winding Staires to goe up into the building. The fourre Galleries without, marked B, are not there, but for the commodity and beuelling of the house, they would stand welthere.

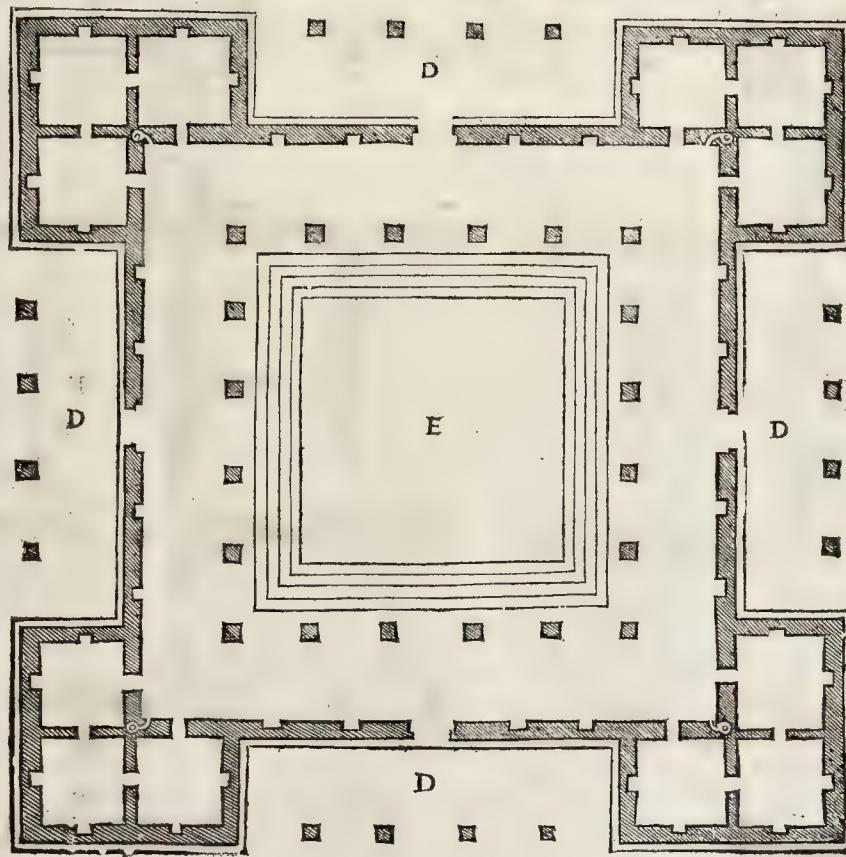
The third Booke.

The fourth Chapter, Fol. 71

In this Figure hereunder, I haue shewed the Orthographic both within and without: the part marked A. sheweth the part without: the part marked B. representeth the Galleries within: the part C. sheweth the ruines within. I haue not set downe the covering or rofe of this house: for according to my opinion, I wold haue plastered such a building, that it might onely be used for a walking place, to behold the countrey about.

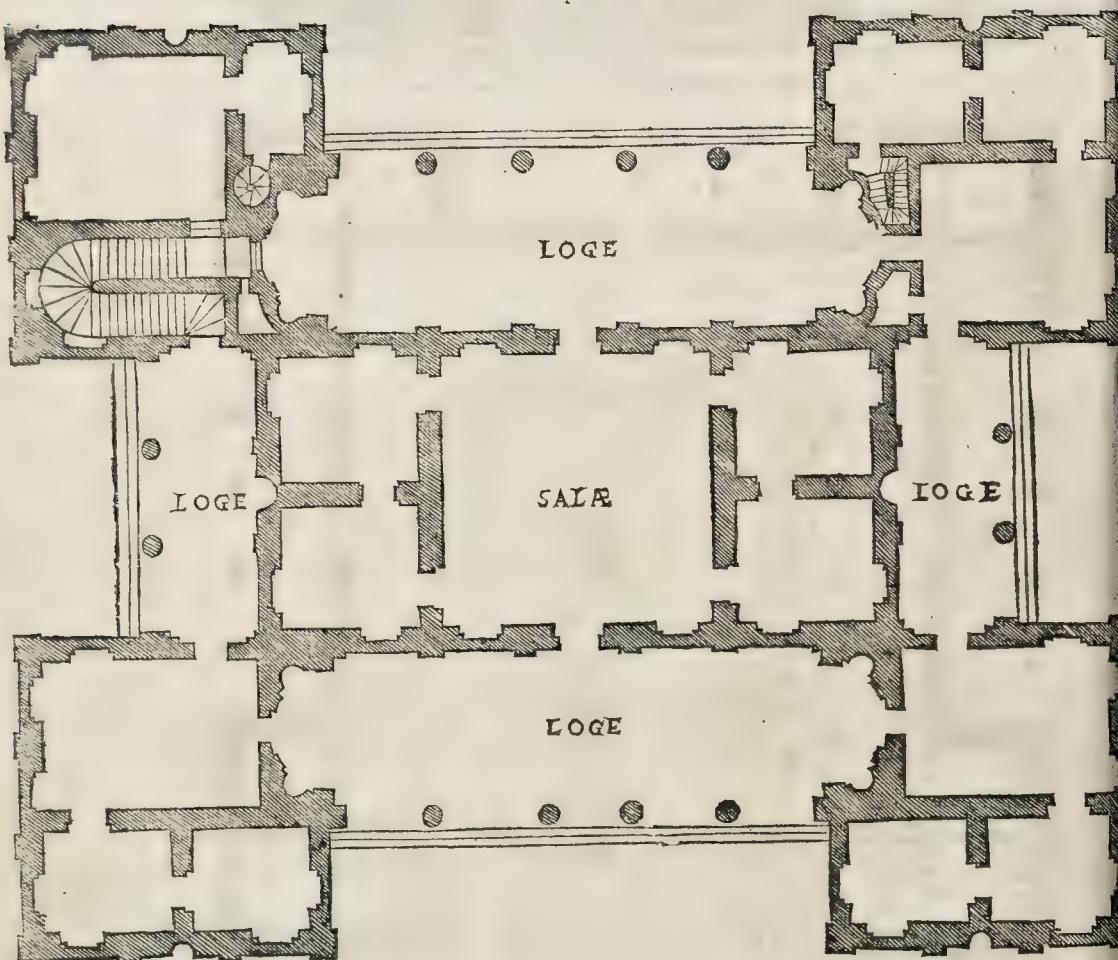


The ground of the Poggio Real of Naples.



Of Antiquitie

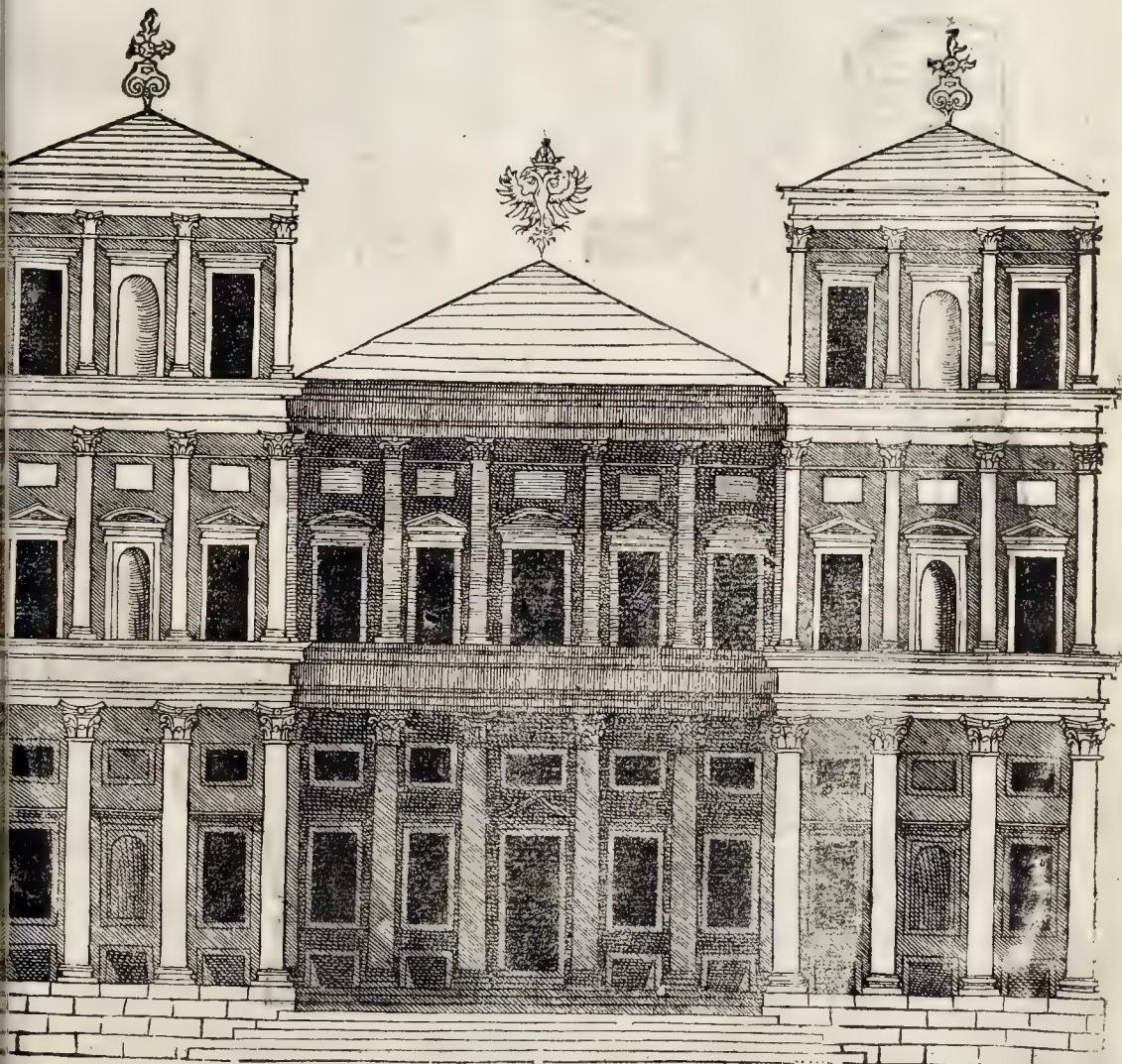
Considering the sayre Building of Poggio Reale, I haue thought good to set downe such an other here in this place; but in other forme so appertements, and pradventure with more ease, for that the places are all of one greatness, which is not so god a forme: but it is necessary that the first shoulde be greater then the second. In this place I make you no place for lights within, for that it is a place in the countrey, being not cumbered on the sides, it hat light enough on all the four corners: but some men may say, that the Hall with the four Chambers, because they haue no light but through the galleries, are darke, for it is no perfect couer: to which I answere, that the house being made to be vded in the tyme of great heat, having no place in the mouds, the Hall and the Chambers will alwaies be cold, by reason the Sunne cannot come vnto them. These places will be very pleasant at noon time, for that the said places haue not so great lights as the other dwellings; yet haue they so much light as they need: such like may be seen in Bolonia, which are made in this manner with Galleries, and daily inhabited. This Building is so disposed, that the corner places being of great thickenesse, the rest shall be strong enough, yea, although the walls had no great thicknesse, in regard they are all counterforts one to the other, yet shall they be of sufficient strength. I will not speake of the measures, for that this being proportioned, the skilful workman may imagine (according to his pleasure that caused it to be built) first the greatness of the rooms, then divide it into so many feet or other measures, thereby to measure all the rest of the building, as the situation of the place may beare it. When this building, aboue all things, shall be placed, that the Sunne may rise vpon one of the corners, and so shone vpon all the sides thereof: for if it standes with one side to the East, and the other to the West, then it will follow, that the South side shall never enjoy the Sunne shone vpon it, which were unwholesome.



The third Booke.

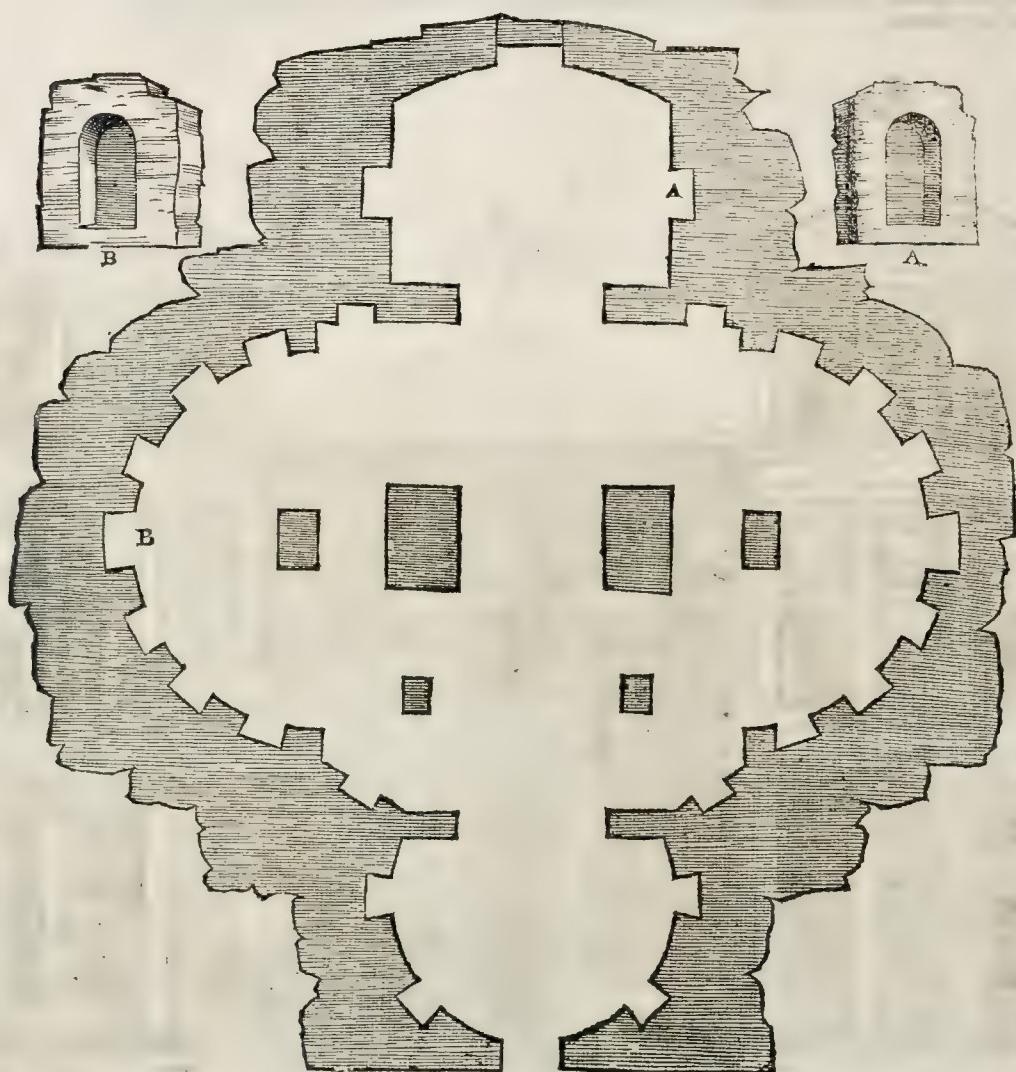
The fourth Chapter. Fol. 72

Men may build in divers and sundry stiles upon the ground aforesayd: but so that this is a place of pleasure, I thought good, so the branenesse thereof, to make it after the Corinthiamanner. I will not trouble my selfe to speake of the measures nor heights, so in my fourth Booke, in the Order of Corinthia, O 2. you shal finde a Treelite, which, together with the judgement of h wile workman, will serue to set downe this measure. And, so that in this Facie there is no shortening at all, whereby you may know the Galleries, the flat and closed places eche from other; therfore I will set downe the two highest sides at the end: you must conceave it to haue flat pillars from beneath upwards; that part betwene both, which is lower, you must suppose hath two Galleries, one above the other, the Columnes whereof would be round: the same is to be understood to be both behynd, and on both sides. Men may also make aboue the Galleries a Tarcace or Pavement, to defend the raine, the Gallery being made with a Leane-to, or Raile, out of the Coynices of the first order of the Figures aforesayd: and so also the Hall in the middle, together with the 4. Chambers of h second story, would haue more light. For 2. causes I haue made the small windowes above the great, in the first story. The 1. is, if you will make the windowes so low, that a man sitting, may easily see out of them, then (if you shold make the windowes no higher then the dore) there would bee to much space betwene the windowes and the rose of the house, which would greatly darken the house: and otherwyse the windowes bring much more light into the Hall. The 2. is, that the Chambers by the Hall had not bee of such height, but you may make hanging Chambers therein, whereto those windowes will serue. I might speake of many other things, which I referre to the judgement of the workeman.



Of Antiquitie

A T first, I was not minded to set this ground, nor yet the building of the 100 Columns, placed in M. 1. in this Booke; for that they are things which the Author hath made by reports and heare-say, which I esteime not worthy to be set by things that are counterfeyted and measured: yet that it shoulde not be sayd, that I haue published this Booke lawne and imperfect, and not full as the Author made it, which might haue given slanderous and envious persons occasion to scoune and scandalize this Booke; therefore I haue not only set this here, but also added this other Figure following by him set downe in the leafe R. 3. And now to turne to this ground, our Author saith, that in Jerusalem (as it was told him) on a hill, there is a building cut out of a reasonable greatness, in manner hereunder set downe: and for that bryemes of the widenesse of the middlemost part, the roofer shoulde not fall in, therfore the two Pilasters were left in the middle, and withall, two of a middle sort by them, with two lesse also before, baderholding the roose, which altogether were cut out of the rocke with instruments. In the first entry are foure little Chappells. In the middle there are 18. and behind there stand 2. and a doore located, whiche sheweth, that men went further. The greatest Chappel is wide the length of a man, whereby you may iudge the greatness of the building. This place hath no light, nor can be perceaved that it had any light. The Chappells are taken out, as the Figures A. and B.

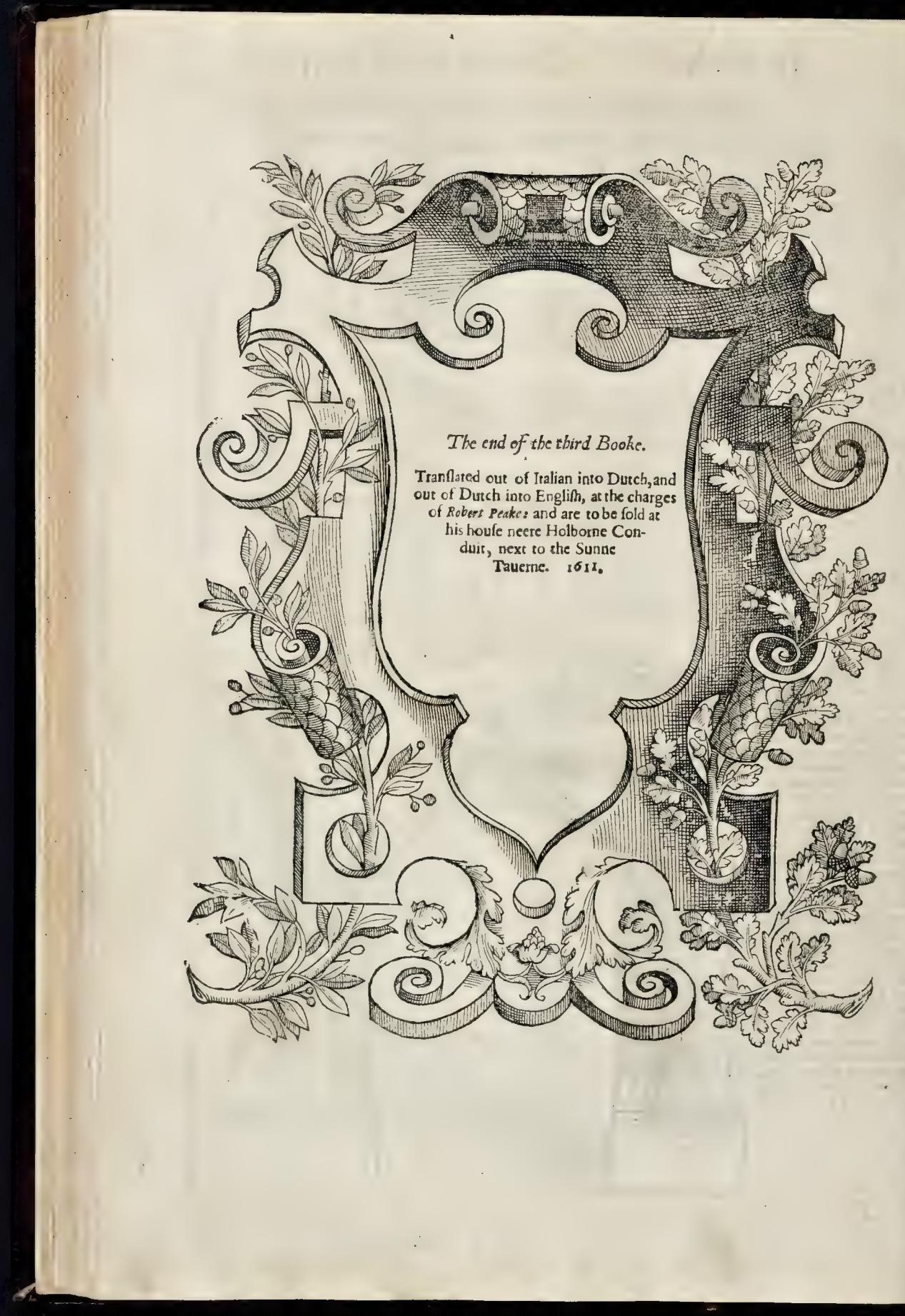


For that our Author before, speaketh of an Arch triumphant in Verona, called Dei Borsari, which he termeth to be barbarous and confused of parts and members, as (according to the writing of Vitruvius of good Antiquities) in effect it is: Penerthelasse, for that Iohannes Caroccus (which our Author alledgeth) hath set it downe for an ornament of Verona, in his booke of Antiquities, much better, and with more deliberation then all the rest of the Figures by him made (for in truthe, they are very grosse: Therefore I thought it good to shew it here to the curious Reader that he may see, and also note (by Vitruvius rule alsoesaid) what is good or ill in it, which may peradventure please some of this country better then another, because they use to looke for much worke in their Architecture. And for this Figure was to great in forme, therfore I have here set downe but the halfe; and you must conceare the other side, that is, an Arch with windows and other ornaments, like these: the lot of Verona, wherewith this building is measured, standeth here on the soles in halfe proportion: of which foot, one small standeth in the Pedestal, under the great Columnes, whereby the measure is to be conjectured: for the sayd Caroccus giveth no other warrant of all his Figures (but only of the Figure of the wonderfull spectacle, as he termeth it) with the Theater above it: but above all, with the goings up to the hill, where a Temple of Ianus standeth, as our Author sheweth afterward in Folio L. 3. in this present Booke. Of this building, Caroccus saith more then of all the rest: and for that I may satisfie the Reader at full, of all that is sayd in this Booke, therefore I have caused this figure to bee printed alone, because it was to great, and (in my opinion) too grosse, to let hereby.

Vale.

The halfe side of Verona, under which this building is measured.





The end of the third Booke.

Translated out of Italian into Dutch, and
out of Dutch into English, at the charges
of Robert Peake: and are to be sold at
his house neere Holborne Con-
duit, next to the Sunne
Tauerne. 1611.

The fourth Booke.

Rules for Masonry, or Building
with Stone or Bricke, made after the five maners
or orders of Building, viz. Thuscana, Dorica,
Ionica, Corinthia and Composita : and
thereunto are added examples of Antiqui-
ties; which, for the most part, agree
with the instructions of Vitruvius: with
some Figures more, added vnto them,
which were not in the first, and some
deuices of the Author, which are
corrected, and hereunto
annexed.

Translated out of Italian into
Dutch, and out of Dutch
into English.



L O N D O N

Printed for Robert Peake,
and are to be sold at his shop neere
Holborne conduit, next to the
Sunne Tauerne.

ANNO DOM. 1611.

To the wel-willers of Architecture.

Vitruvius saith, that such as haue built without learning or instruction (although workemen) could never make any famous or commendable pieces of worke: no more can others, being no workemen, such as haue followed the letter or writing onely, and made no profe: of which, some haue presumed to fater their doings upon Vitruvius: yet in diuers places of their writings, which are found, they could not crie vp their rules orderly, but haue left many things doubtfull, and (more) haue esteeme that to be good and commendable, which in worke is not to bee endured. The cause of this error, is, that he left Booke of the sayd Vitruvius, wherein the Figures are, was lost: whereby men might haue knowne and found out his meanings: so that hereby it appeareth, that some Antiquities haue beeene very bare in their worke, and especially, in their Orders of Dorica, because Vitruvius nameth no Dorica Bases: but in stead thereof, speaketh of an Attica. Now it may be, regarding that he there speakeþ not of any Order of Attica, therefore they durst not make any Dorica Bases or Columnes: on the contrary, others profitably contemning the darknesse of the writer, (or for want of knowledge) haue so far exceeded their Author in many things, that they haue not onely forsaken and left the examples and reasons of good Antiquities, but also (more then that) haue made their worke vnscremely, and ridiculous to mens eyes, as may be seen in diuers ancient works: whereby, gentle Reader, many workmen, well seene in both, haue boone cumbered shrein, and especially in this our time, Bramant of Castle Durant, Balthazar of Scienne, and many others, for that (not onely by meanes of Iulius the 2. Pope, but) also by others, good Architecture was bettered in their times: who, after long disputation and searching of many, as well Authors and Commentaries, together with the examples of good Antiquities, haue with authority (to make an end of all doubts) not onely added this Spira Attica, of the Dorica, but also as many orders as now are vsed, beginning at the Tuscan, as the grossest and slenderest of all the rest, and haue reduced the same into a certaine and common forme, together with their ornaments and measures: which rules Sebastian Serlius, a workeman and scholer of the sayd Balthazar, hath written, and set out in figures; so that, leaving the obscurities of Vitruvius, we may make an incorrigible worke. And for that all those that loue workmanship, understand not the Italiæ, therefore (in my opinion) I haue translated the most certayne and best rules out of Italian into Dutch, and out of Dutch into English; onely the names of all Procelli, Bases, Capitals, Cornices, &c. which are not named in Dutch nor English, for that Bastian, by Vitruvius termes, of eth the common and moderne Italiæan words, which by some shoulde be as hardly understood as the Latine. But I would commend him, that, seeing we take upon us to follow Vitruvius writings, that we give him the name of Vitruvius, that the learned might bee understood of the workeman, and the workeman also understood of the learned. And for that the workeman might the better read it, I haue printed it in our ordinary Dutch letter. And althoþ this fourth Booke of severen was first set out, because it is the best, yet the other also are no lesse fit and convenient to further Architecture or Art of Building, as in the ensuing Epistle you shall see.

Sebastian Serlius to the Reader.

Quing and friendly Reader, after I had collected certaine rules of Architecture, thinking that not only those of deepe conceyt would understand them, but that also each indifferent man of wit might conceave them, as he is more or lesse addicte to such an Art; which rules are deuided into seuen Books, as hereunder shall be set downe: but for that this Art requireth it, therefore I thought it requisite to begin with this fourth Booke, and to set it out, first, which is more to the purpose, and more necessary then the rest, for the knowledge of many sorts of Building and ornaments thereof, to the end that euery one may haue some knowledge of this Art, the which is no lesse pleasing to the mind of those workmen that thinke vpon things that are to make, then also to mens eyes when they are made. Which Art, by the wisedome of the famous and excellent spirits that are now in the world, doth flourish in these dayes, as the Latine tongue did in the time of *Julius Cesar*, and *Cicerio*. Then with glad and ioyfull heart receyue at least my good will, (though the effect ensueth not) which, in trueth, I haue (to pleasure and satisfie your minds) in this respect.

In the first Booke, I will entreat of the beginning of Geometry, and of diuers cuttings through lines, in such sort, that the workman may yeld reason for that he worketh.

In the second Booke, I will shew in Figure, and by reason, as much of Perspective Art, that if the workman will, he may declare his conceyt or purpose, by reasons and figure.

In the third Booke, workmen shall see the Ichnographie, that is, the ground: the Orthographicie, that is, the raysing vp of a Building before. The Scenographie or Sciographie, that is, the insight, by shortening of the most part of the Buildings that are in Rome, Italie, &c. diligently measured, and set by them in writing, with the places where they are, and their names.

In the fourth, which is this, I will speake of fие maner of Buildings, and of their ornaments, as Thuscana, Dorica, Ionica, Corinthia and Composita, that is to say, mingled. And by these, the whole Arte is learned.

In the fift, I will speake of diuers kinds of Temples, set downe in diuers formes, that is, round, four-square, six-cornered, eyght-cornered, Ouall-wise, and crosse-wise, with their ground, heights and shortenings, diligently measured.

In the fixt, I will speake of all dwellings, which, at this day, may bee vsed, beginning at the meanest house or cottage, and so from degree to degree, proceeding to the most rich, fayre and princely Palaces, as well in Countrie villages, as in great Cities or Townes.

In the seuenth and last, shall be set downe many accidents, which may happen to workemen in diuers places, strange maner of situation, repaireyng of decayed houses, and how we should helpe our selues with pieces of other buildings, with such things as are to be vsed, and at other times haue stood in worke.

Now then, to proceed readily herein, I will begin with the greatest and rusticke order of Building, that is, the Thuscan, being the playnest, rudeſt, and strongest, and of least grace and seemelincſſe.

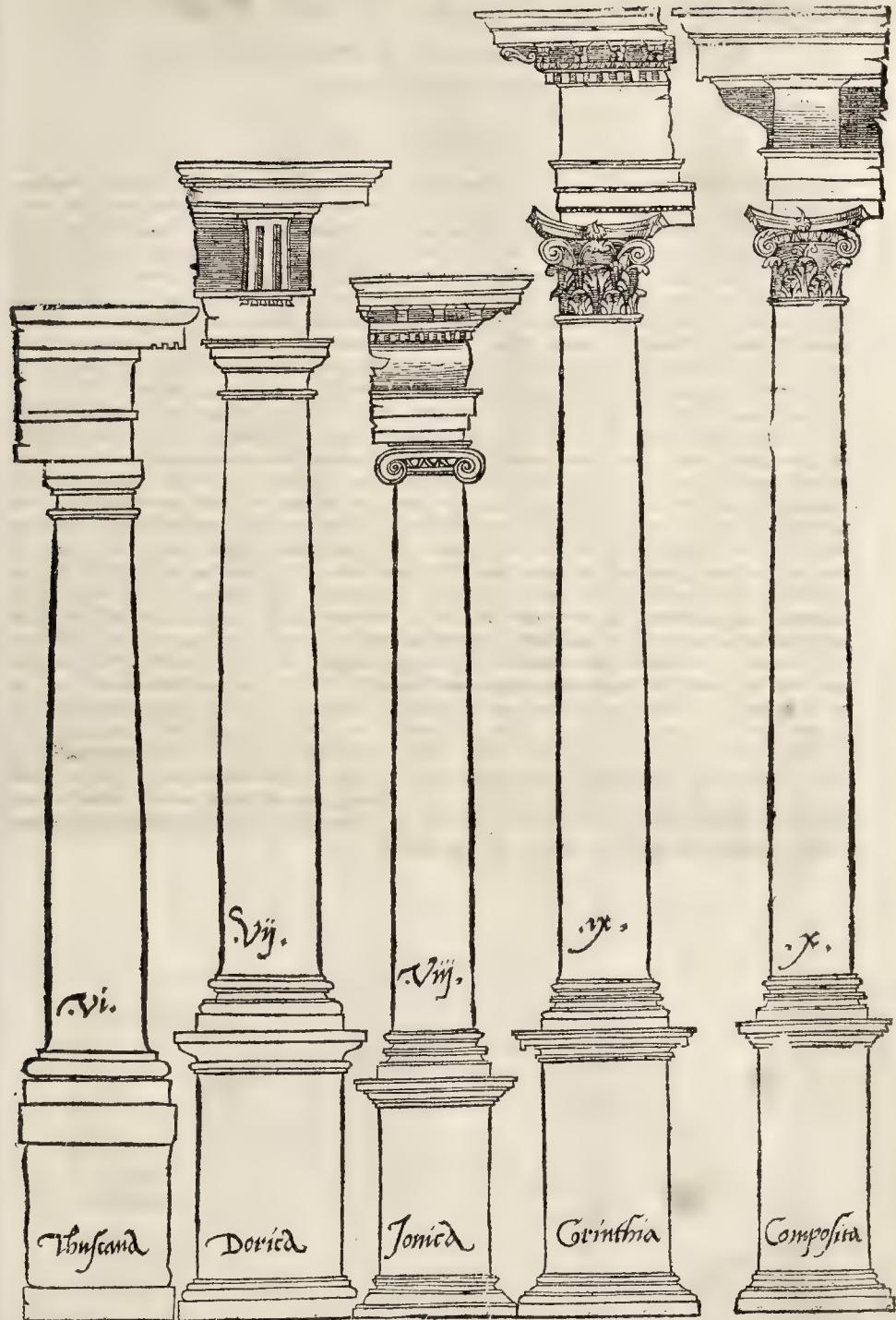
The Author to the Reader.

The ancient workmen in times past (as Vitruvius affirmeth) dedicated their workes and Buildings to the gods, according to their natures, strength or weakness; so is the forme called Doric ascribed to the gods, Jupiter, Mars, and valiant Hercules, taking such formes from strong men. The forme called Ionica, is ascribed to the goddess Diana, Apollo and Bacchus, as of the nature of Patrons, that is, of wise & sensible women, which are both tender and strong: for Diana, by her feminine nature is tender, but by being to hunt, she is strong: Apollo, by reason of his beauty, is tender; but being a man, he is strong: the like of Bacchus. Yet the Corinthia is taken of mayds, and they ascribe all to the goddess Vesta, and her chaste mayds: yet at this time I thinke it god to proced in another sort, nothing differing from the ancients aforesayd. My meaning is, to follow the manner and customes of the Christians, that I (as far as I may) will ascribe holy Buildings to God and to his Saints: and profane buildings, as well publike as private, I will ascribe to men according to their professions. So say I then, that the Thouscan maner (after my opinion) is fit for strengths, for Gates of Cities, Townes and Castles, places for treasure, munition and Artillery to kepe them in; for pylons, haunes of the sea, and such like things, seruing for the warres. It is true, that rustiche and playne worke, that is, such Buildings as are made of rough stones, and others that are made somewhat smother, according to the pleasure which the Stone-cutters take therein, are sometimes mixed with Dorica, and sometimes with Dorica and Corinthia. Neuertheles, for that the Thouscan order is the roughest set forth, serce more then the other are, I am of opinion, that the Country Building is more like unto the Thouscan, then any of the rest: which you may plainly see to haue bin obserued by the Thouscans, as wel in their chief Cities and Townes of Florence, as without in their Country Villages, in so many rich and fayre Buildings, made after the rustiche maner, as may be seene in all Christendome, mixt with such a flicht maner of worke, as the workeman thought good. Therefore I conclude, that such Buildings are more agreeable to Thouscan order, then any other. Therefore, altering somewhat from Antiquities, and some others of ours, I will in divers sorts shewe of such workes, viz. how to make Gates of Cities, Townes, or Forts; as also, in publike and private places, Bouties, Galleries, Windowes, fisches or leates, hollowed in worke, Bridges, Water-courses, and such like severall Ornamentes, as may happen into a workeman's hands to doe. Men may also (not differing from the ancient rules) mix this rustiche maner with the Dorica, and also with Ionica; and sometimes with Corinthia, at the pleasure of those that like to please their owne fantasies, which a man may affirme to bee more for pleasure then profit: therefore the workeman ought to procede with good advice, especially in publike buildings, wherein comeliness is commendable.

In the beginning of this Booke, I obserued the Comedians order, who (when they intend to play any Comedy) first send out a Prologue, who in few wordes giueth the audience to understand what they intend to entreat of, in their Comedy. So I, meaning in this Booke to entreat of sime maner of Buildings, viz. Thouscan, Dorica, Ionica, Corinthia and Composita, haue thought god, that in the beginning thereof, men should see the Figures of all the severall kinds therof I purpose to entreat of. And although that in the Columnes and their ornamentes, all the measures and proportions are not set downe, but onely the principall, by general rules: yet will I not sayle, as occasion shall serue, to let them downe in particularites: but this is done, as I saye, to helpe in general rules for an introduction onely, the better to be undestood of every workeman, and in the beginning will obserue Vitruvius order and termes, marked on the sides with A. B. C. that every workeman may name them according to his country speech. And first, the Stilo bato, or Thouscan Pedestall, I meane the flat, without Crowne or Base, shall bee a perfect foursquare. The perfect Dorica shall be as much moe as the drawing of a line from corner to corner, of the perfect foursquare, placing it upright. The Pedestall Ionica, shall be of one foursquare and an halfe: the Pedestall Corinthia, shall be a foursquare and two third parts thereof. The Pedestall Composita shall bee of two perfect foursquares. Also, wonder not, that the Chapter next ensuing is the fift, which others would esteem the first; for that the first Booke dooth containe a Chapter of Geometry: the second of Perspective, shall be of two Chapters: the thred of Antiquities, shall be of one Chapter, which maketh fourte Chaptres: so that, this consideryd, the next shall be the fift.

Fiue maner of Buildings.

Fol. 3





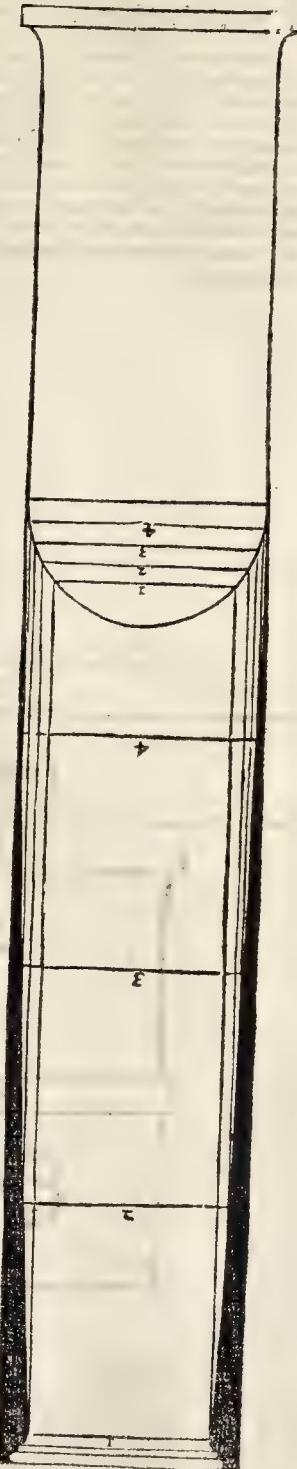
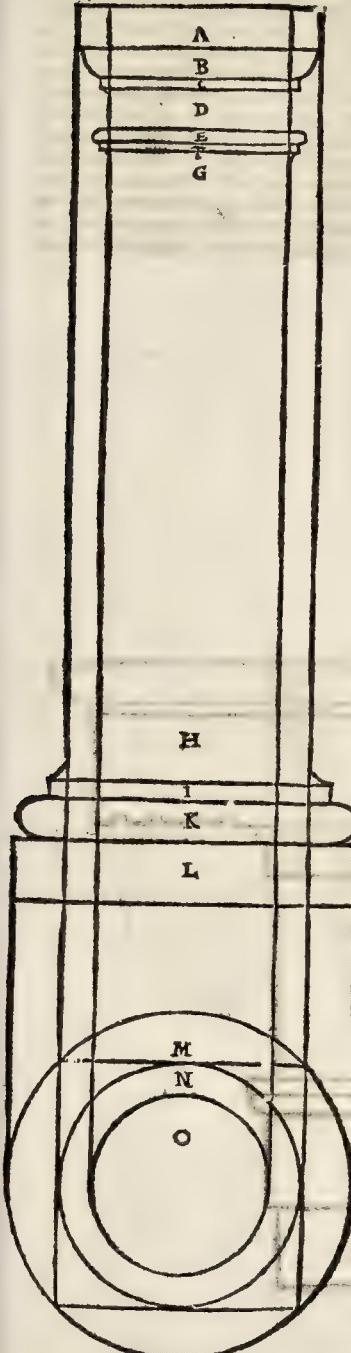
Of the order and maner of Thuscan workes, and the Ornaments thereof.

The fift Chapter.

IN Vitruvius fourth Booke and seventh Chapter we find, that a man shold make a Thuscan Columnne of seuen parts high, with Capitall and Base, which measure shold be taken from the thicknesse of the Columnne below. The height of the Bases or Basement, shold be the halfe of the thicknesse of the Columnne; which sholl bee diuided into two equal parts, wherof one shall be the Plinthus, the other deuide in three, two parts therof shall bee the Thorus, the third the Cincta. The Procedur you shall make in this maner: First, make a Circle as great as the Columnne is thick below, placing it in a square: without the square draw another Circle, close about the corners of the square, which shall bee the Projecture. And although all other Bases have their Plinthus foursquare, yet this of Thiscan must be round, as Vitruvius teacheth. The height of the Capitall must bee like the Base: that deuide in to three parts: one part shall be the Abacus: the other shall be deuided in four parts, three for the Echino, the fourth for the Annulo or Cincho, which may be call'd a Girdle, Band, or List in English. The third part resting, shall bee for the Hypotrachelium, or Freese. The Atragali with the Cincta, is halfe the Freese; but that deuided in three, two shall bee for the Round, the third his List, the bearing out must bee as the height: and although this List is here named with the Capitall, yet it is a part of the Columnne, which Columnne ought to be made thinner above a fourth part; also the Capitall in the uppermost part shall not be greater then the Columnne below. The maner to lessen the Columnnes thus: Let the body of the Columnne be deuided in three parts: the third part below shall hang at the leade, and the other two third parts you shall deuide into as many equal parts as you will: then at the third part of the Columnne draw halfe a circle, and from the lines that hang there, from the outermost corners of the Capitall inwards, measure the eight part, which in all shall be a fourth part: from under the corner (where the Columnne is thinnest) you shall draw two lines by a leade, to the halfe circle, and those parts of the circle outwards, you shall set below, in as many even parts as the two third parts of the Columnne holdeth; which being done on both sides, then there shall be as many Paralels or crosse lines, drawn from the one poynt of the halfe circle to the other, each line being marked with number, from the top downwards, and the like upon the lynes that deuide the Columnnes; which numbers being orderly placed, then it is certayne, that the first line shall agree with the thinnest part of the Columnne above: after, take the second line of the halfe circle, and set it upon the second line of the Columnne, then the third upon the third, and the fourth upon the fourth: when that is done, there must be a lyne drawne from the Base of the halfe circle, to the lyne 4, and from the lyne 4, to the lyne 3, and from the line 3, to the lyne 2, and from the line 2, to the lyne 1, also a lyne: and so from the second side of the Columnne: and although that the lynes in themselves are right, yet they make a crooked lyne, which the iudicious workeman knoweth how to regire and moderate at his will on all sides in the gathering of the lynes. And although this rule is made for the Thuscan Columnne, which is lessened above a fourth part, yet it may serue for all sorts of columnes; and the more the deuiding of the Columnnes and the halfe Circle are in number, so much the lessening will dimynish.

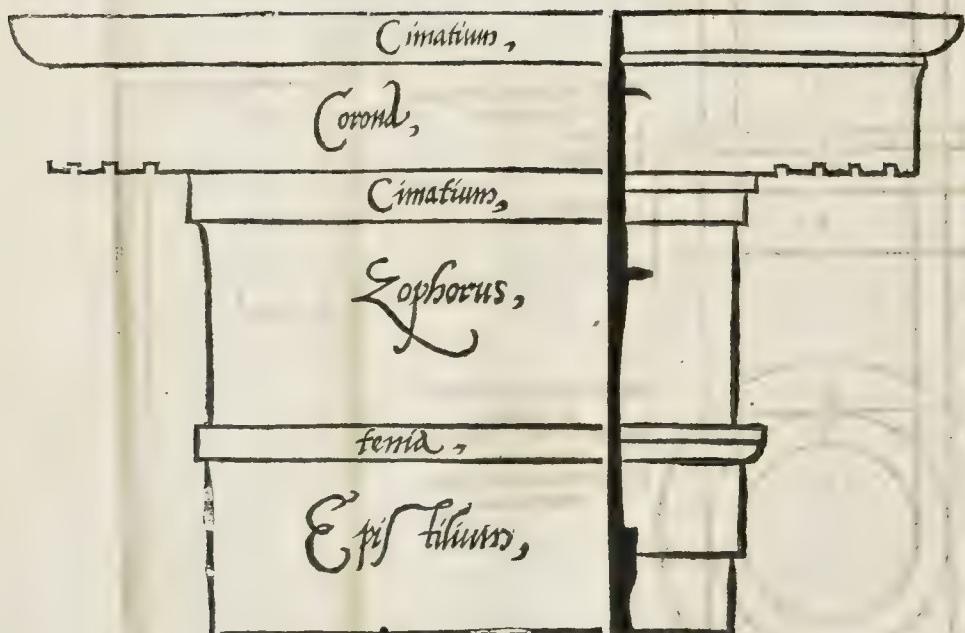
The fourth Booke.

The fift Chapter. Fol. 4

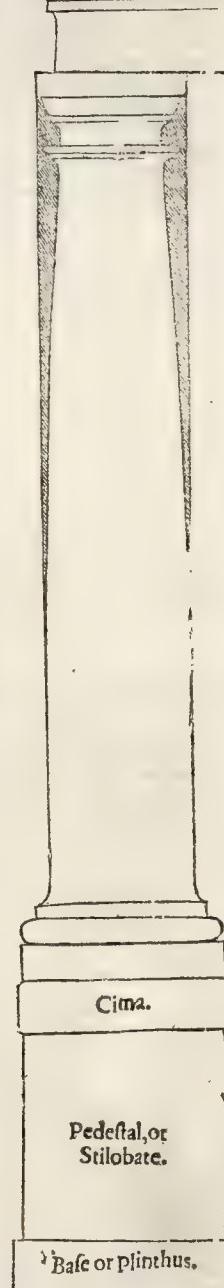


Of the Thuscana

The Column being finished with the Capitall and Base, then the Architrau, Frise and Cornice are to bee set thereon. That Epistilium or Architrau must be as high as the Capitals, and the Tenia or Lis, the first part thereof. That Sopherus or Frise of the same height. The Cornice also, with her members, must bee the like: and the same being divided in four parts, one part shall be for the Cimatic, two parts for the Corona, and the last for the Fasic vnder the same. The Projecture or bearing out of them all, must be at least so much as their height. And vnder in the Corona you may cut channels or hollowings, great or small, as the worke is, at the pleasure of the workman. But, for that this worke is grosse, and plaine of members, a man (in my opinion) may take vpon him to adde some parts unto it, which may seeme to belong unto the same; which must be done when men desire to make the worke shew better, as you see in this herebunder set downe. I commend also those crostures that haue most Projecture or bearing out, without their four squares; especially, when the stones are fit to beare it: Which Projectures are both commodious, and beautifie the worke: commodious in this, that the walking place vpon them will bee broader, and it will also kepe the worke from water: beautifying in this, that when men behold the worke with convenient distance from it, it will shew the greater; and where the stones bee scantled, by reason of their smalnesse, the Projecture will supply that want, by shewing greater.

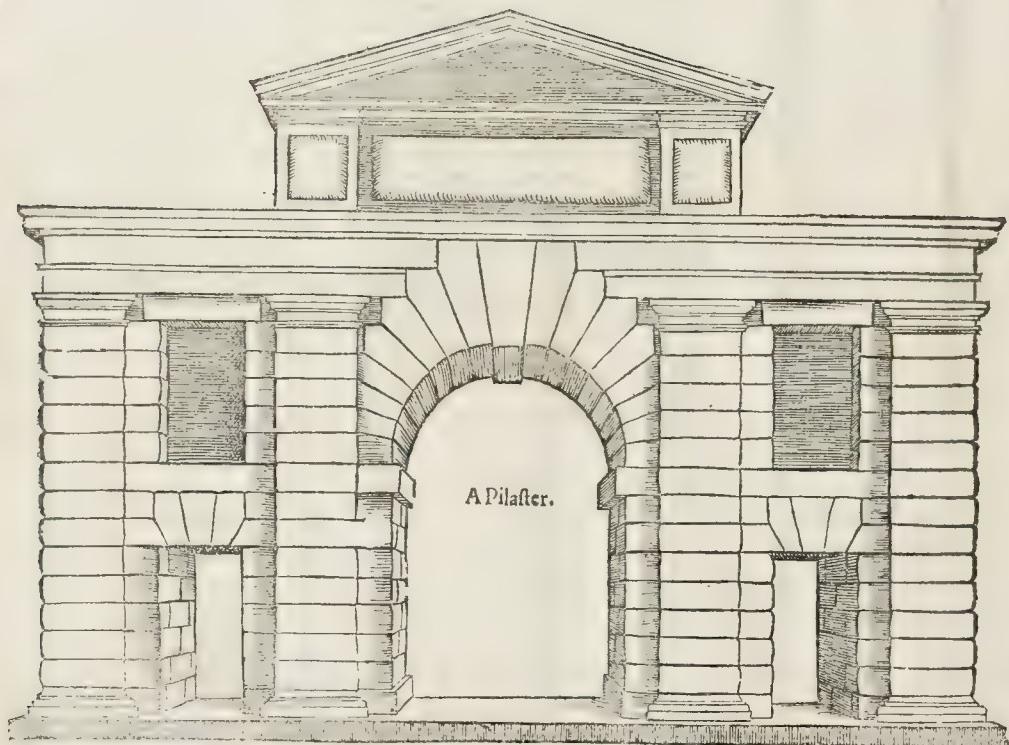


ALthough I said before, that the Thyscan Columnme (according to Vitruvius rule) ought to be of seuen Diameters high, with Basys and Capitalis, which proportion is approued god; neuerthelesse, for that the first Columnnes (as you haue heard in my small Booke) were made in six parts, taking the measure from mens fet, which is the sixt part of the same: And also, for that þ Columnnes called Dorica, are now of seven parts, the ancient workmen having another part unto them, to heighthen them, therefore, in my opinion, by the same autheritie, for that the Thyscan Columnme is stronger then the other, I judge, it might be made lower then the Dorica; and, by my aduise, be made but of six parts, with Basys and Capitalis, this you may hold for a common rule. And, for that neither Vitruvius, nor any other workeman that I haue seen, haue set downe no rule for the Stilobato or Pedestall, and in Antiquities, as far as I can see, were by workemen made, as necessarie required; whether it were for rasing of Columnnes, or to a going vp with stayres, to Galleries, or by any other occasions: Therefore, not being compellid therento, I am of opinion, that every workeman shoulde to each kind of Columnne set a convenient and stameyn Pedestall, as reaon reqüireth, and as he saeth cause. It is certaine and well knowne, that the Pedestall at least must bee foursquare, that is, the body thereof, without Base or Cime, shalke the Thyscan Columnme being the best of all, the Pedestall thereof ought to be a perfect foursquare: the forepart thereof ought to be as broad as the Plinthus of the Base of the Columnme: the height shoulde bee divided into seuer parts, one part whereof shall be set under, for the Plinthus, and one for the Cime, whiche members shall be vncut: so then, if the Columnme bee of six parts, the Stilobato or Pedestall shall bee of six parts also in it selfe, according to the proportion of the Columnne.



Of the Thuscana

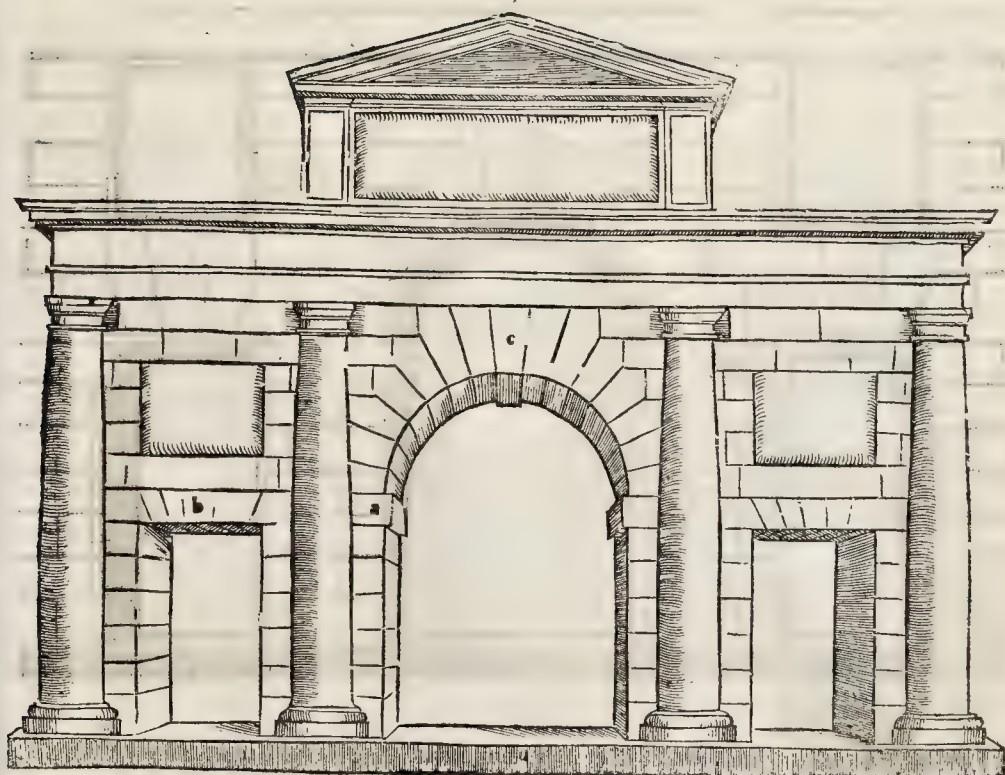
I have promised in this Boke, only to intreat of the ornaments and different maner of Buildings: therefore I will not at this time shew how men shold place the Gates of Townes and Forts, with their sides, places to lay out Cannors, with other circumstances of defence, leaning such care to the two: bemen belonging to warres, according to the situation and accidents of time and place. But I will shew you, that when the Gates of the Cittie, Towne or Fortresse are placed, how men, in my opinion, shold set them forth, setting downe some Figures thereof. You must understand, that each Gate or Porte is to bee after the Italian maner, and ought, of necessity, to have a Posterne Gate, which are called Porten van Secourse, which are the small Portes on the sides. But to obserue the Symmetry, that is, a due measure, they ought to be made in this manner. The meASURE of the Gate is thus, as much as the breadth of the light shall be, the halfe wherof shall serue for the height. The breadth of the light is devided into sixe parts, wherof one part shall be for the breadth of the Pilasters on either side of the Gate: the flat of the Pillars thereof shall be as broad as the third part of the light, and the height, with Capitals and Basles. The height of the Basles shall be a third part of the breadth of the Pillars, and so much also the Capitals, obscuring the rule set downe in the first Columnne. That Epistolum, Zophorus, and Coronæ shall be altogether of such height, as the breadth of the Pillars, by the rule aforesayd. Betweene the one Pillar and the other, the Posternes or small Gates shall bee, and the iudeynesse shall bee as broad as the flat Pillars. The height shall be twice as much as the breadth: the Pilasters shall be the tyrd part of the said Posterne. The elevation exrapping vp above the gate, shall bee at the workemans will. But the proportion of the Fattigies or Frontispicie (which is called with vs, the spanning, couer, or rose) I will shew in two sorte in the order of Doyce.



The fourth Booke.

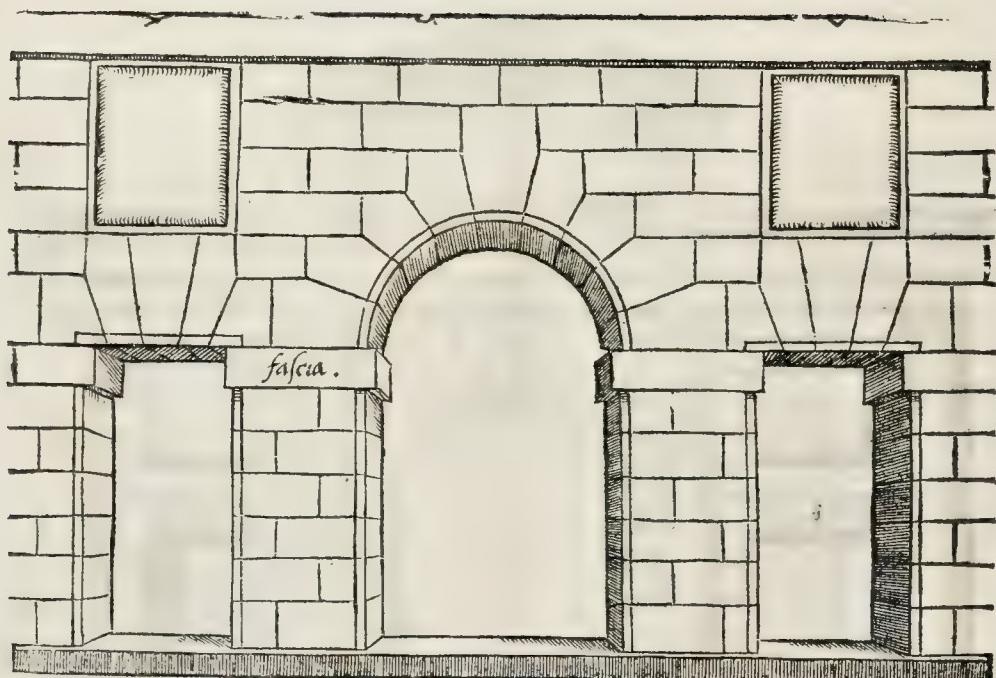
The fift Chapter. Fol. 8

And so that the wō;ke man ought to be copious of inventions, to please himselfe and others, the Gate of the City, Towne, or Fortresse, may be set out in this manner, obseruing this rule: that so broad as the going throughe of the Gate is, the height shall be as much, and halfe as much agayne, that is, 2. parts in breadth, and 3. parts in heignt. The Pilasters shall be the 8. part of the widenesse of the Gate: and the Columnes stand for the round Columnes and flat Pillars, being the fourth part of the Gate. But so that the Columne is a third part set into the wall, and is bound fast with other stones, moze for shew then bearing, it is to be made 7. parts high, and also of 8. at the wō;ke mans will, which will set forth the Gate with more shew. The widenesse of the Posterne shalbe the halfe of the middle Gate, the Pilasters also(as the greater)that is the halfe. The height thereof shalbe such as the Facie that beareth the Arch, and it shalbe the Superclie, or Architrave thereto, as we call it: and if you find not a stone all of one p̄tē fit for it, then you shall make the Cunel or Pennants as you ſe them heere in the Figure. And thus the proportion of the Posterne Hall bee, that is, 3. parts in breadth, and 5. of the like parts in height. The Cunel or Pennants of the Arch, shall be 15. In the Bases, Capitalis, Architrave, Freke, and Cornice, you must obſerue the rule aforesayd; and the elevation in the middle shall be at the wō;ke mans will, as I ſayd of the other: and all ſuch workes, the groter they be made, and boſt out, the stronger they are for fortification.



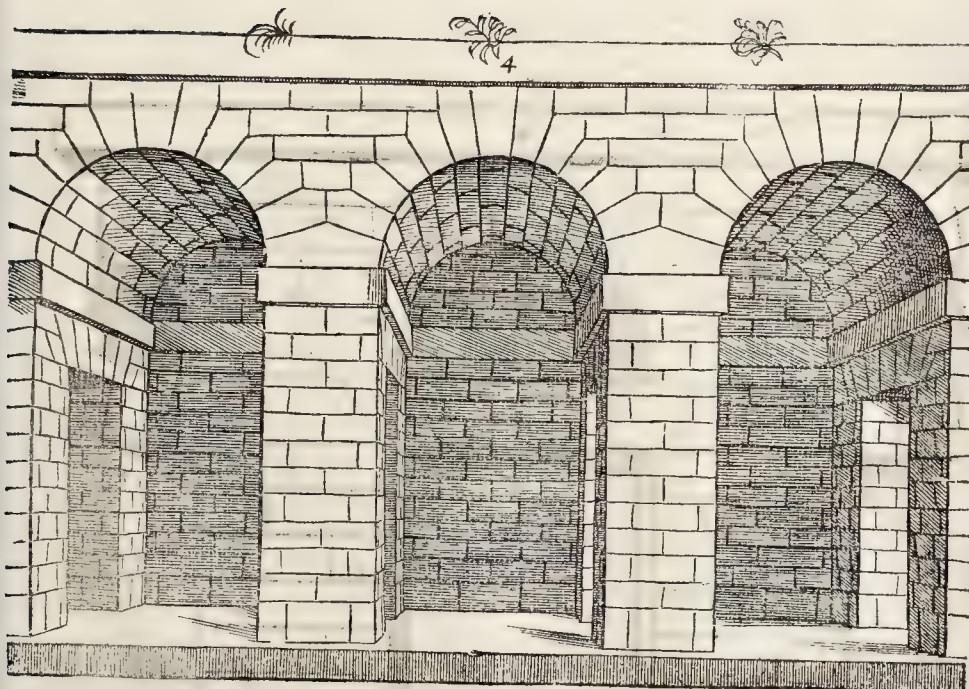
Of the Thuscana

A man may make Gates of Tylones and Forts in another manner, both pluyner and stronger, following the order hereunder set downe: and the proportion of the widenesse of the Gate shall be as much as the height is under the Facie, which beareth vp the rooff: and from the Facie upwards, as much higher as the halle Circle; yet alwayes at the two hemans will to be increased or diminished, and especially, as he is by accident restrained. The two Postures are to be made, as I haue before shewed: Their widenesse must be the halfe of the middle Gate, and so much of the wall shall be left betwene the great Gate and the two small: which height shall be doubled with the breadth, and the Facie, which upholdeth the Arch, shall alio holde vp the Cunei of the small Gates. Yet must we take such order, that the Facie shooting through, shoulde bee the Supercilis, which, as I sayd, may bee altered at the will of the workeman; without altering them from the Figure.



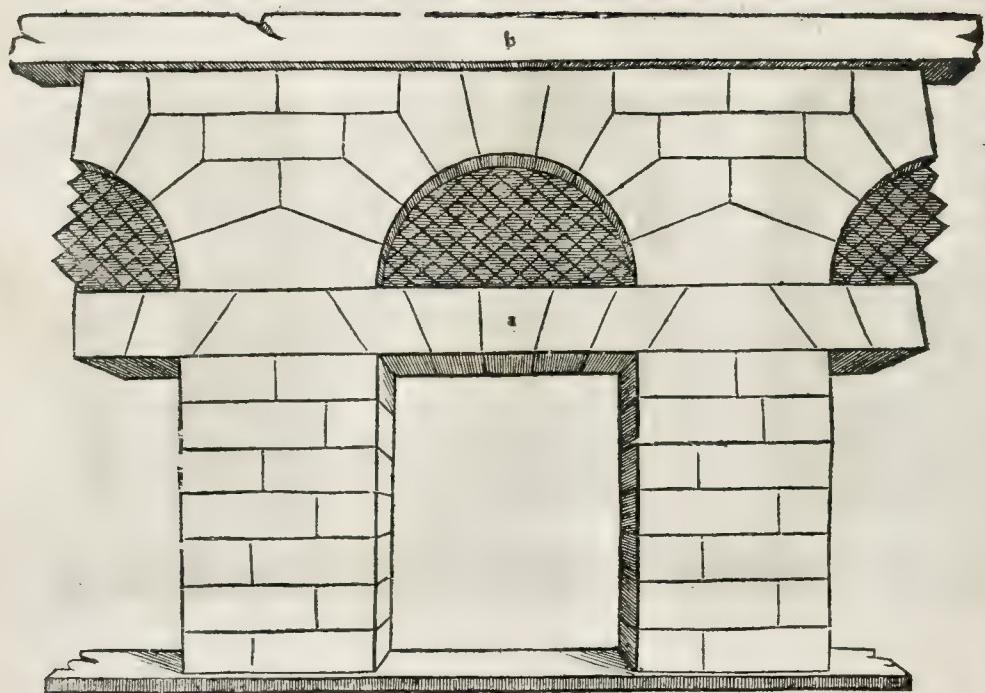
The fourth Booke. The fist Chapter. Fol. 7

Divers kinds of ornaments, many times, put the workeman in mind of things which he peraduenture would not have thought of: Therefore the Figure ensuing will serve the workeman to good end in building, as occasion shall serve: as in the wall of a fortresse, where the wall being of a good thicknesse, this worke within it would first serve for a place to stand byt in, making the walking place above broader; and easly for defence in time of warre: and soz more securitie, it might within be filled byt with earth. It might also be the workemans chancie to build about an Hill: and to set himselfe thereof from the waters, that alwayes with the rayne fall from it, & make the earth to sinke, It is therefore necessary for the workeman to set the like buildings against such an Hill, whereby he shall be assured from such suspition, and it will also be a great strengthening to the worke. The like invention Raphael Durbin used at Monte Mario, a little above Rome, in the Vineyard of Clement the seventh, by him begun in the time of the Cardinall Ieronimi Geaga: and without Piscra, for the defence of water against a Hill, was made the like.



Of the Thuscana

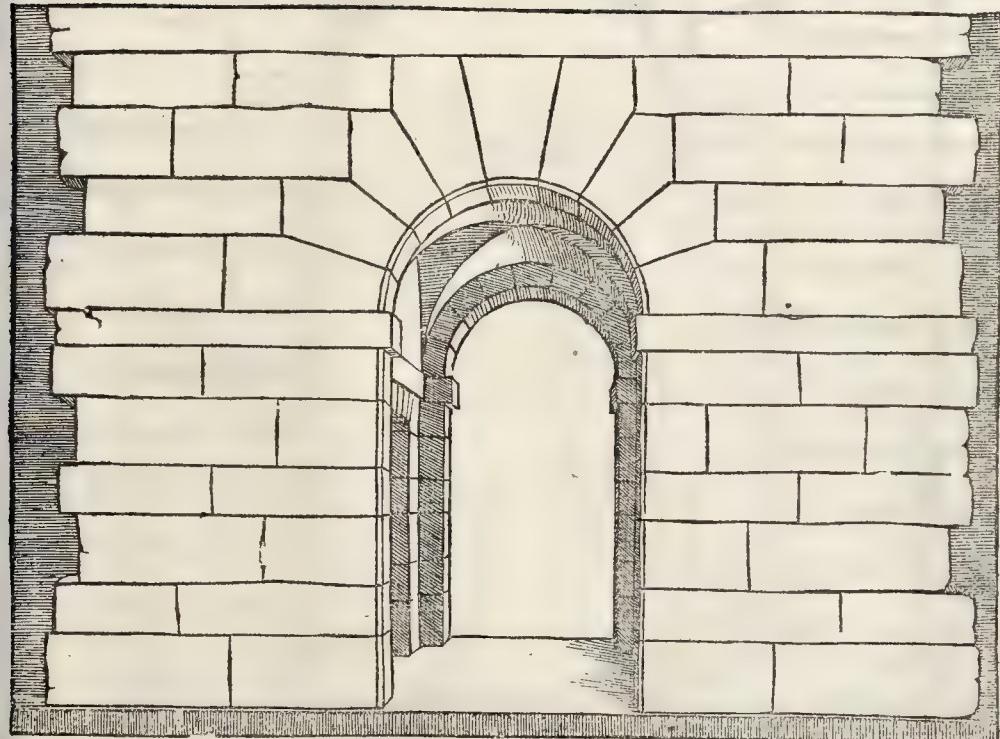
A
skient workmen, in this kind of rusticall worke, have used many and severall kinds of Buildings, as you may see herenunder, wherewith a workman may helpe himselfe in many things, as necessarie requireth: the measure shall be, that the light shall be a perfect foursesquare, and the wall betwene both, shall be a fourth part lesse. That Supercribie or Architraue, shall haue the fourth part of the light, and shall be made of Pennants which run vpon the Center in unequall numbers: and above the Supercribie shall be layd an halfe Circle, divided in nine equall parts, the lynes being also drawne vpon the Center. The Cunel or Arch-stone being formed, and the thre pieces layd betwene it, with the Face about it, will in this sort be an everlasting worke. But soz that the Cunel of the Architraue must lyf fast, it shall be needfull to fill the halfe Circle with Bricker. And for the moze beautifying, you may use Rothes, as the ancients used to doe, as you may, at this day, see in Rome at S. Colmians and Damian; which, although the Rothes be old, yet it is very strong.



The fourth Booke.

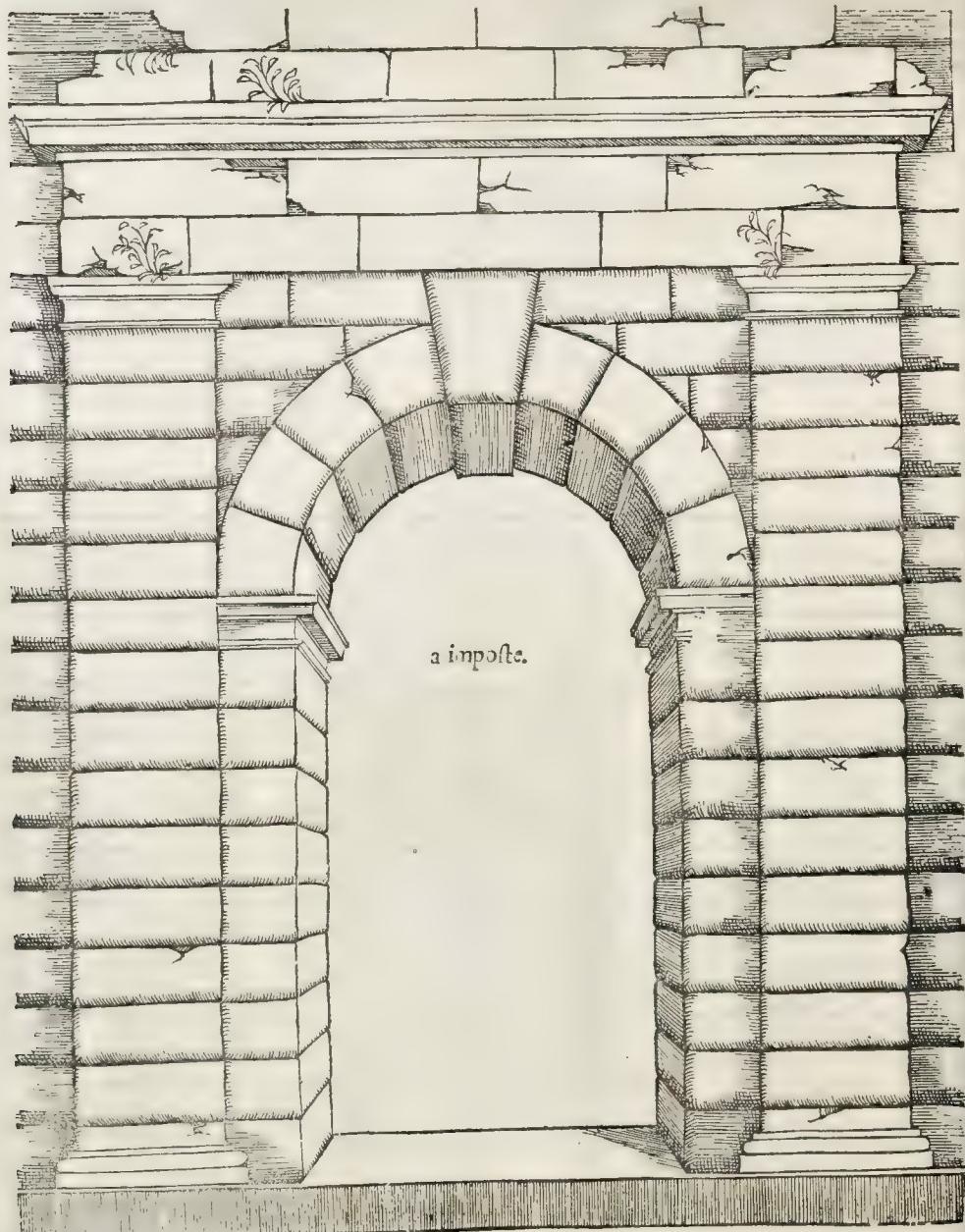
The fist Chapter. Fol.8

ASi in the beginning I laid, the warkeman may use this Gate in diuers places, but not for Fortresses, for the passage through serues not for Artillerie, or other great preparation for wars; neuerthelesse, this part may well serue for the outermost Port or Gate: The proportion shall be, that the light or opening shall be twice so high as the bredth. The Arch-stones of the halfe Circle shall be nine, drawing upon the Center of the Circles. The Facie vnder the Arch shall be the seventh part of the Gates; from the Facie downwardes to the Pavement, shall bee denide into sevene parts and an halfe, and shal be sixe stones broad: thre whereof, shal be each a part and an halfe, the other thre of one part; and thus the sevene parts and an halfe are denide. The height of the middlemost Arch-stone, or the clo-sing stone, which you will, shall be halfe as broad as the Gate. The Facie above the Arch-stone, must bee as broad as a fot, that is, the thinnest part of the sayd Stone: but the middlemost Arch-stone, and also the seke vnder, shall be a fourth part broad.



Of the Thuscana

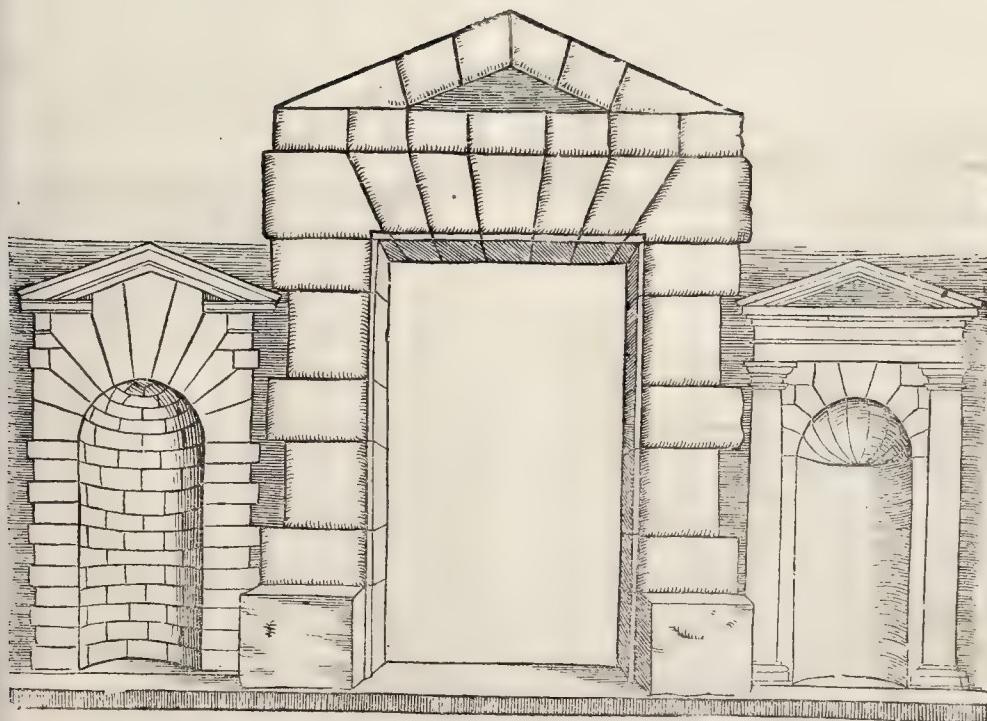
The proportion of this Gate, viz. the opening is twice as high as broad: the Pilaster and the Arch are a fist part of the heighth of the light: the great Pillar shall be once so broad againe, and the height of five bretchels. The height of the Gate shall be a fourth part, and the Capital a fift part, and so great the Capital or impost under the Arch shall bee. The Fante in the place of the Architectue shall be as high as the Capitals: the Frise also as much, and also the Cognice, following the rule alsoesayd: the rest may bee found with the Compasse.



The fourth Booke.

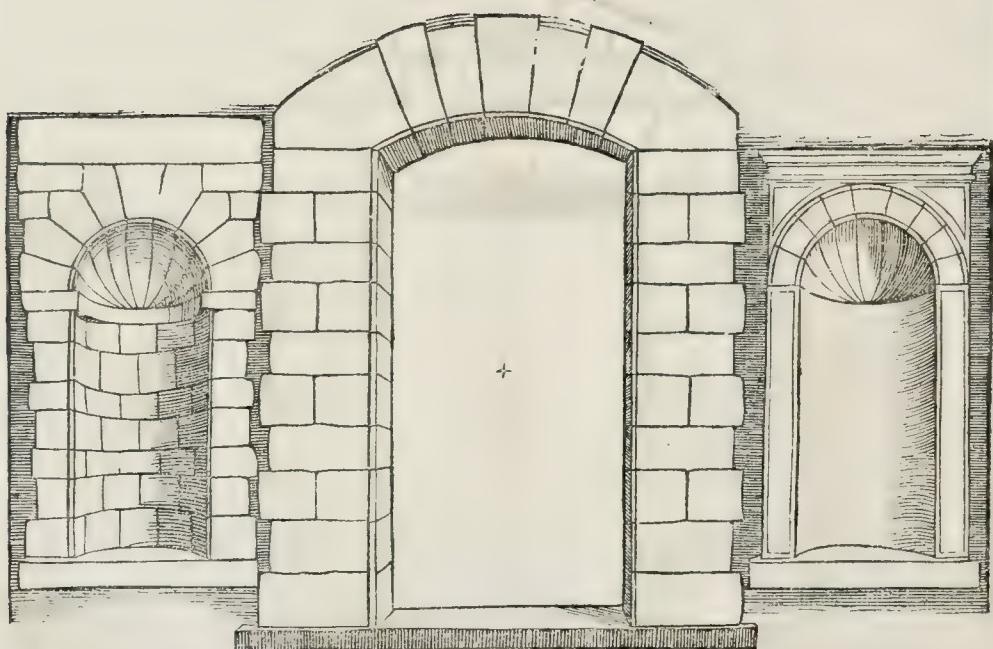
The fift Chapter. Fol. 9

Although the Gate hereunder set downe is much different from the fashion of the rest, yet, for that it is Tuscan
worke, and ancient, I thought good to set it here, the which, in former time, was in Rome, En Capo de la milicia
Traiana, although by the decapes thereof, no w^t not to bee seene: the two flices or seates that stand by it on the
sides, are out of their places, with which it s ingenious workeman may serue his turne withall, if he place them
where they shold stand. The proportion of them (by the rule aforesayd, may easly be found: touching the gate it selfe,
I will set downe no meastur, for it is very easie to be found.



Of the Thuscana

This maner of Gate is couered by the first part of the Circle, and is very strong worke, yet the Penmans will not agree with other Buildings of Stone: therefore if a man will make such worke, it woulde stand well in a wall of Bricks. Touching the proportion, I will not speake, so that it is easie with a Compasse to find the measure thereof. But the Niches or seates, placed by it to fill vp the place, the woxkeman may, at his pleasure, set where he thinketh best, and ther may not onely serue for Niches, but also for windowes: if they shold bee bled for Niches to place Images therein, it is necessary that the height shold exceed the double proportion of the breadth or somewhat moze, that they may be more fit and correspondent for Images to stand in, which is alwayes referred to the woxkeman.



The fourth Booke.

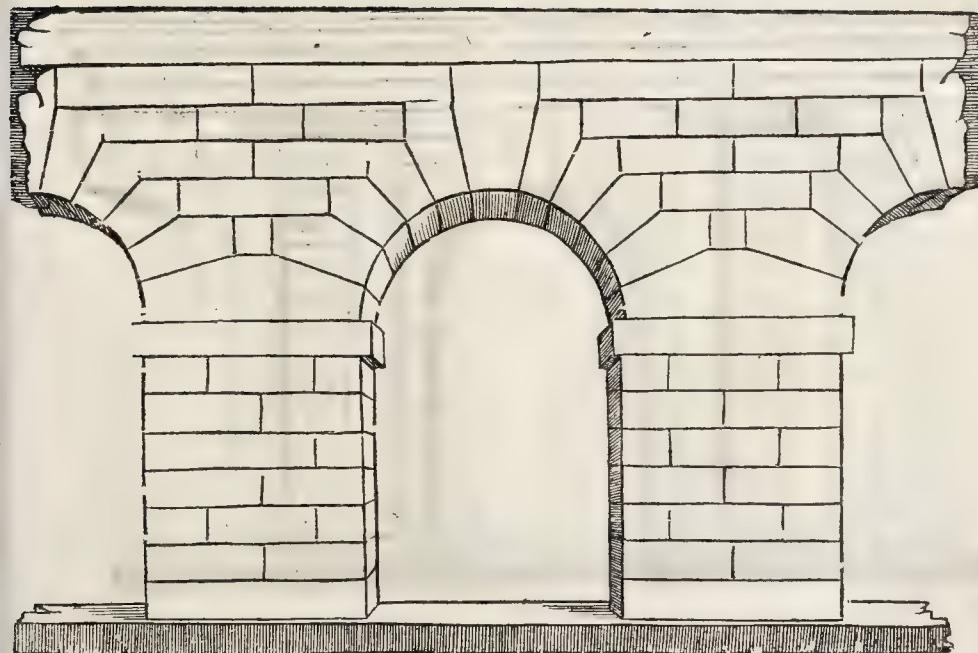
The fist Chapter. Fol. 10

At times past, the Romanes used to mingle Dorica, Ionica, and sometime Corinthia, among their rustical buildings; but it is no error, if a man mixe one of them in a piece of rude worke, shewing in the same nature and Arte, so that the Columnes mixe with rough Stones, as also the Architane and Frize, being corrupted by the Peinants, shew the worke of nature: but the Capitals, and part of the Columnes, as also the Cornice, with the Frontispicio or Gavell, shew works of Art. Which mixture, in my conceyt, is a good sight, and in it selfe sheweth god strength, therefore fitter for a Fortresse then for any other Building: nevertheless, in what place soever the rustical worke is placed, it will not doe amisse. In such mixtures Iulius Romanus tooke more delight, then any other man, as do we witnesseth the same in sundry places, as also Mantua, and without Rome, the fayre Palace called vulgariter El. Te. Which, in truth, is an example in these daies, both of good Architecture and paynting. The proportion of this Gate is to bee made thus: the widenesse must be of double proportion, that is, twice so broad as high, iust vnder the Arch. The Pilaster shall be the seventh part of the widenesse, and the Columnes twice as thicke as the Plasters: the height with the Capitall shall be eight parts. The Capitall, Frize, Achitrave and Cornice, shall bee made as is sayd before: also, the Falsgion, Frontispicium or the Gavell shall also bee shewed in Dorica order. The halfe Circle of the Arch, shall bee deuided in eleven parts, for the Stones of the Arch; but the clofing stone shall bee greater: the which stone the workeman may, at his will, hang somewhat out. The Facie which doth uphold the Arch, shall bee halfe the thicknesse of the Columnes: from thence downe wards, you shall deuide it into nine parts, whereof two parts shall bee for the neither part of the Columnes, the other seven deuided into equal parts, shall be the stones which bind the Columnes, drawning crosse ouer them. And the ruderþer this worke is boorded out (yet artificially) it wold, in that case, shew moze worhemanlike, especially the stones that bind the Columnes and also the Peinants.

Of the Tuscan.

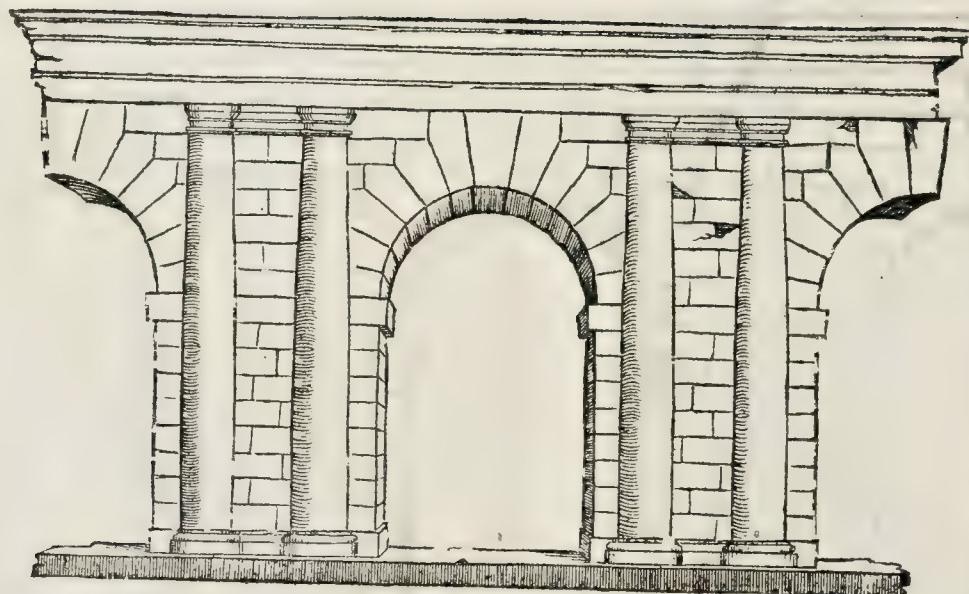


It is not sufficient that the woyke should be strong, but it must also be made artificially, to please mens sight. Wherefore this building of stone is not onely very strong, but also ingenious and pleasing: with wiche intention, the workman may serue his turne in many things. The proportion shall be, that the opennesse in the bretch, shall be once, and halfe as much as in height: the halfe Circle is devide into 9. parts and an halfe, because the middlemost stone is one fourth part broader then the rest. The height of the closing Stone, is halfe the opennesse of the light. The flat Facie by holding the Arch, is the sixt part of the light: from the Facie downewards are 7. parts made: the Facie aboue the Pennants, halbe as broad as the closing Stone bader it is, which may be made hanging out underneath the eyght part of his bretch. Touching the binding of the other stones, with the Pennants, you see it playnely in the Figure.

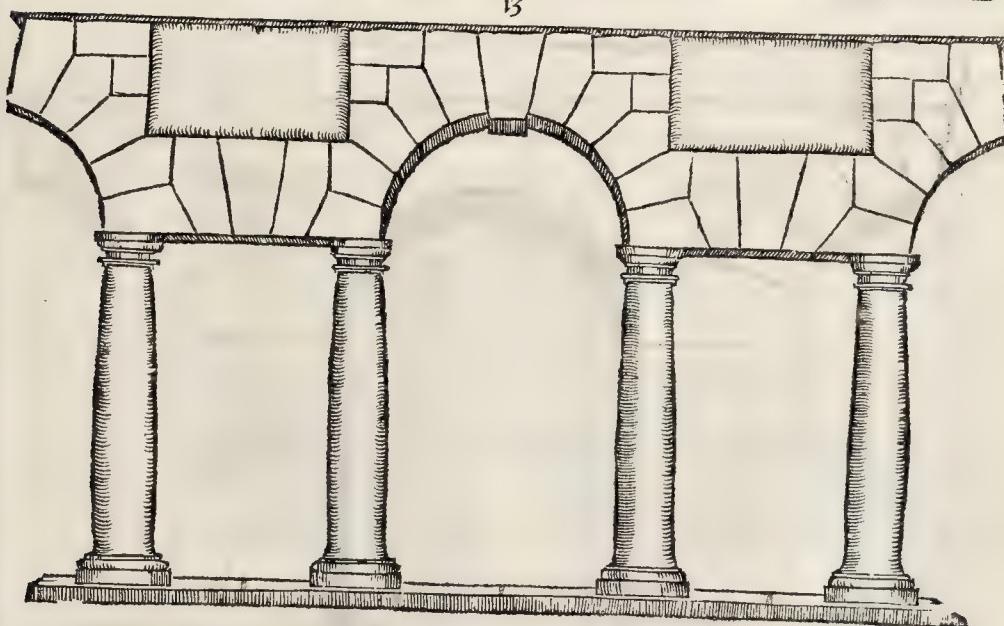


Of the Thuscana

For that pleasure is sometimes turned into beautifying, and sometimes to ornaments surpassing necessarie, to shew
Art, according to the wealth of the builder: This invention is made for pleasure, strength and beautie: for plea-
sure, in regard of the opennesse thereof: Strength, for that betwix both, there is good strete of wall, well bound
together: and soz beautie, because it is rich of ornaments; with which inuention a woxkeman may helpe himselfe
much, in divers things, as I haue sayd. The proportion therof shall bee, that the closed or massie worke shall bee as
brode as the opening: whiche opening shalbe of twise so much height. The Pilasters shall be the eight part of the wide-
nesse, and the Columnes the fourth part. The inter-Columnies, that is, the widenes betweene the two Columnes, shall
be the thicknesse of one Column. The heigh of the Columnes, with Bases and Capitalis, shall be of eight parts. In
the Architrave, Frise, Cornice, Vale and Capital, the rule also; sayd shalbe obserued. The Pennants and other bin-
dings are sene in the Figure: and although the Columnes surpasre the rule two parts; yet, because they stand nere to-
gether, and are mado fast in the wo:ke, mo:re soz beautie then strength, it may passe well enough, by the authoritie of an-
cient woxkemen.



It is an excellent thing in a woxkeman to be full of invention, in regard of the diversitie of accidents whiche belong unto building: for sometimes a man shall find strok of Columnnes, but so lowe or shert, that they serve not so that purpose, for which men would use them unto, vntill the woxkeman deuise some meane to helpe them. Therefore, if the Columnbe not so high as it will reach to the Facie, that lyeth like yrofe of this Gallerie, then with these maner of Pennants a man may rase it higher. If on both sides it hath god strong shoulders: touching the wayght abone, it will be very chargeable, therfore to make it without binding of iron bares, it would not be sure: but it is leste to be feared, if the Gallerie were not so broad, but that it might be concernd with stones that were all of one piece, or else to make strong beames therein. The proportion hereof shall be, that the widenesse of the Arches shalbe the thicknesse of 4. Columnnes, and the height twise as much. The least space betwene the Columnnes, shall be of the thicknesse of 3. Columnnes, and the height, of the thicknesse of 6. Columnnes, and each widenesse shall be once agayne as high as broad. The Columnnes, if they be over-burdened with wayght, should be of the measure before set downe; the rest are clearely to be seene in the Figure: but touching Sales and Capitais, I haue layd sufficient at the first, in the treaty of the first Columnne.



Of the Thuscana

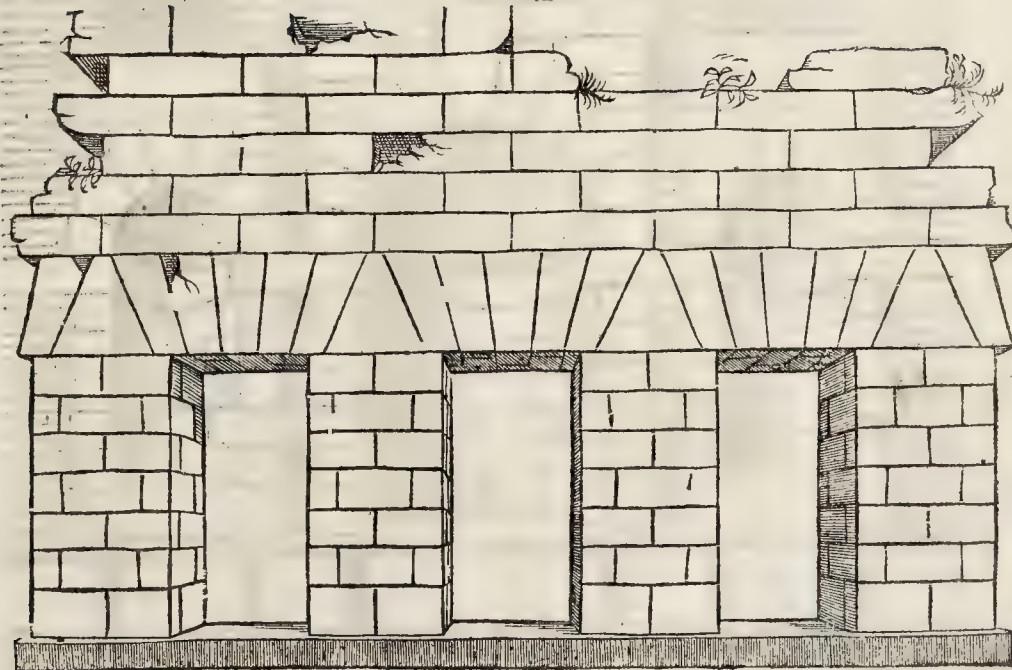
AS this Arch is very streng, considering the concordance of the binding, so also it is ingenious and pleasing to view. Whiche invention shall not only serue for Galleries of such wchke, but for Bridges over Riuers; Conduits to carry water from one Hill by to another, and so to a Conduit. The proportion is, that the widenesse from one Pilaster to another, and also the height, shall be to the Facie that beareth the Arch. The Facie shall be the seventh part of that widenesse or height: from the Facie downewards is divided into sixe parts: the halfe Circle into nine parts and a quarter; so the closing stone is the fourth part more than the other: the rest may be found with the Compasse.



The fourth Booke.

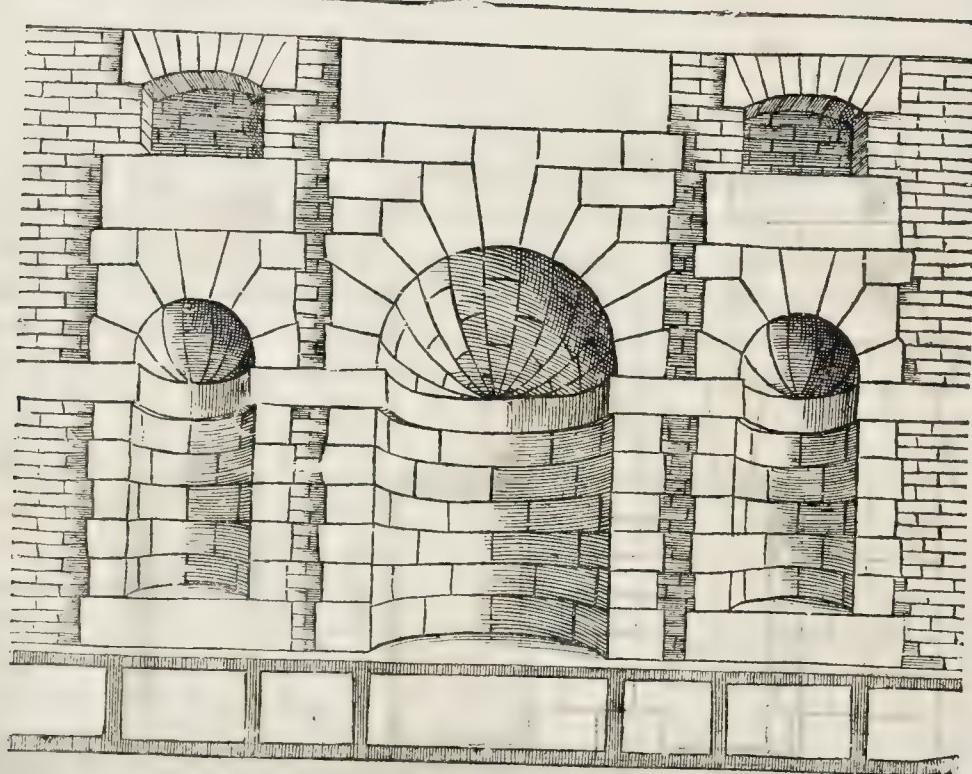
The fift Chapter. Fol. 1²

I may sometimes fall out, that a workeman shold need many holes in great walles, for the building of his house, whereto this walle belongeth, to carry the waight for strengthening thereof: and were there not so much need of light, some of them might be filled vp with Wycke. The proportion shall bee this; that the space of the lights and the masse walle, shall be both of like heighth, and twice so high as broad, although all such things are to bee increased and diminished at the workeman's pleasure. The like walle is yet to be seene in Rome, being not very old made, but such as are in these dayes made, and stronger. The example whereof is at S. Cosmas and Damianus.

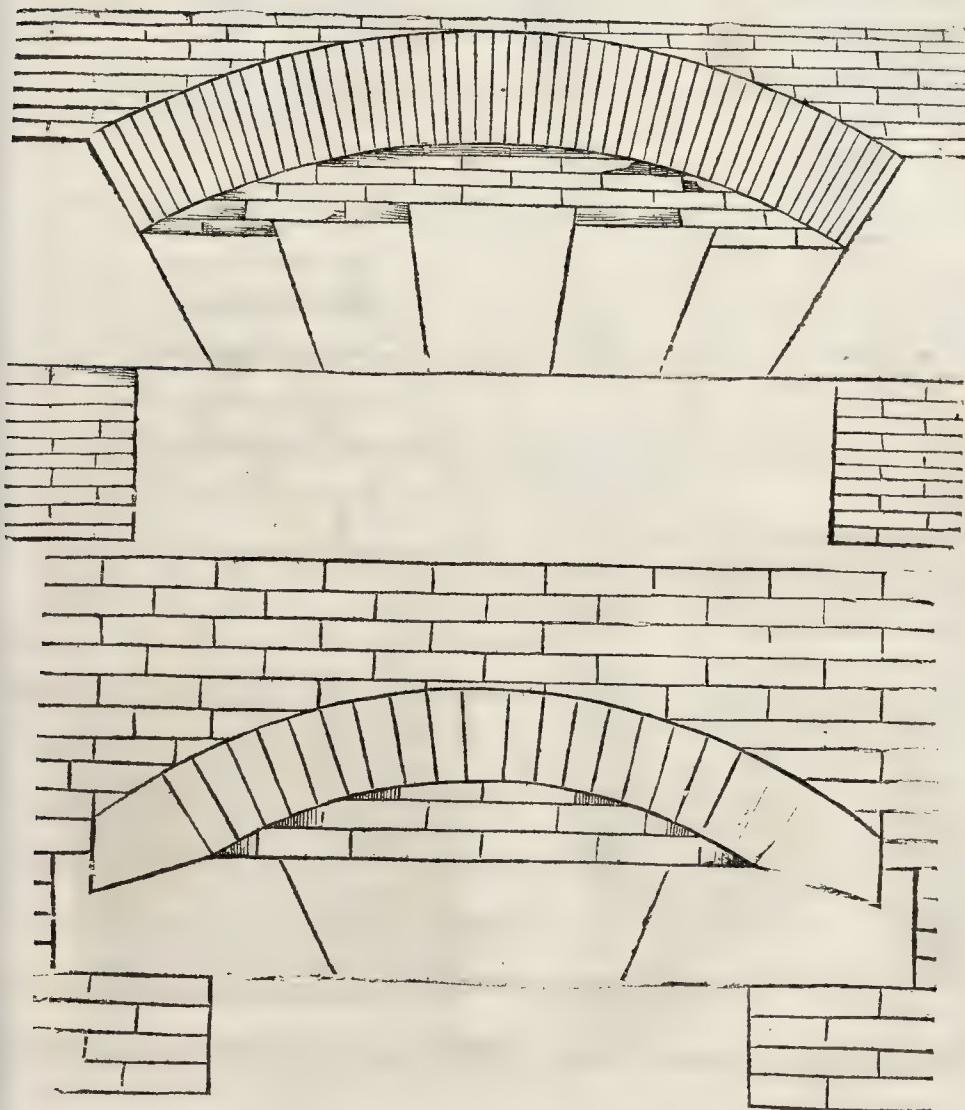


Of the Thuscana

It is said, that sight preserues memory, whereby oftentimes that is made, which workmen would not have made; if it had not beene made before in some other place, and so, at some tyme, you shall se in a Court or elsewherre a side of a Wall, that shall haue neyther Dore nor Windowes in it, and yet it is well set ent in this roud manner and boylis kind of woxke: by whiche inuentione, a woxkeman may helpe himselfe: In which places a woxkeman may set 3 images, or other reliques of Antiquitie. Touching the meausures and proportion therof, I will not set it downe, for I leauue it to the woxkeman to heighthen or make broad, as occasion serueth.

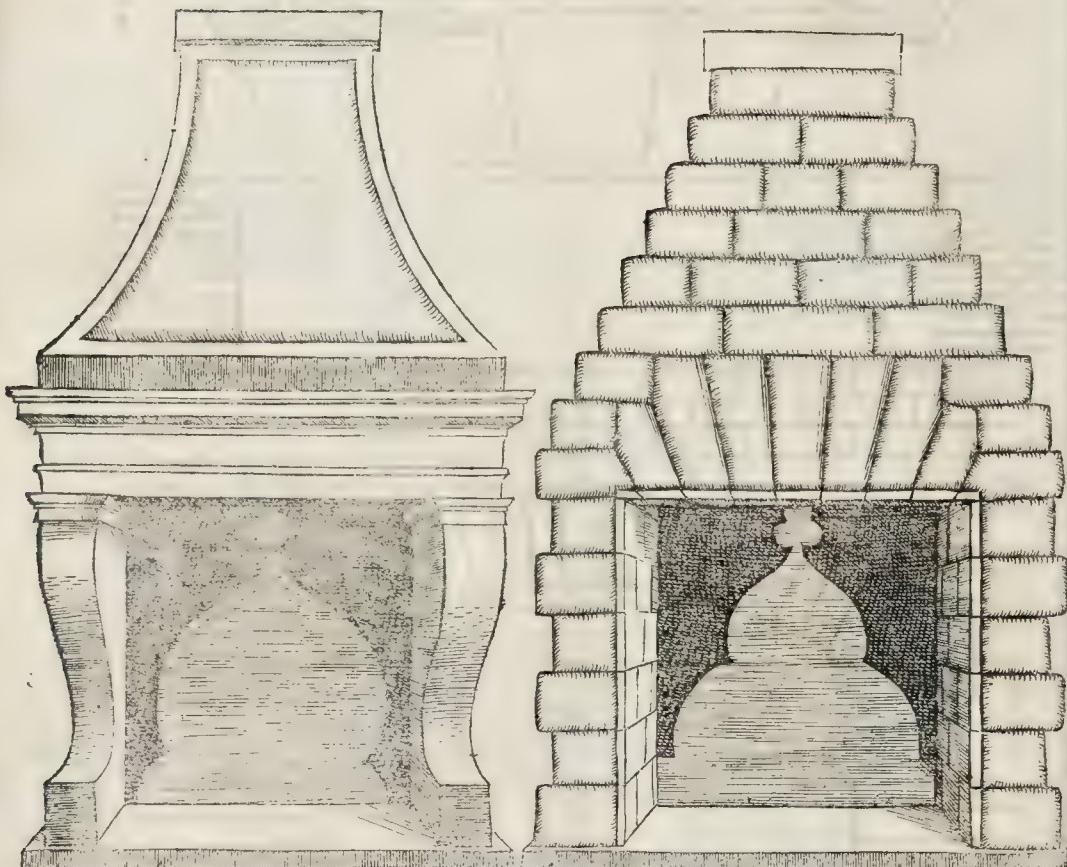


For that the most part of the Supercties or Architrites, as we call them, that are set ouer Gates or other things, by reason of the wiednes (if the stoncs be not of a god bignesse) may yeld to the waight, whereby in time, they breake and decay, as you may see in many places: Therefore you shall, although it bee in great distance (so that the shouders on the sides be strong) make such worke of pieces, as herunder are in divers wayes set downe: which, with out doubt, will be very strong; and the heauier the waight is abone, the longer it will last.



Of the Thuscana

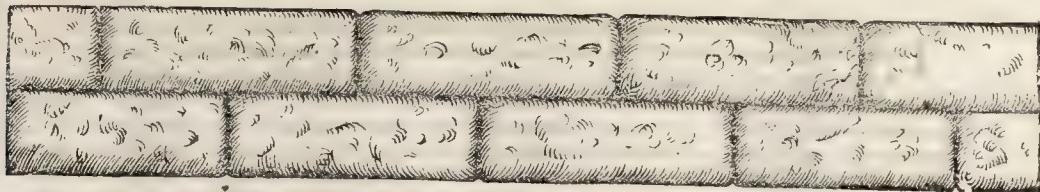
Although that in Vierouius writings there is no mention made in what maner men in ancient times made places in Palaces and common houses to make fire in, yet men find in olde buildings some shew of Chimneyes, to give a way to heyd smoke, neþher can I finde by any workeman the truth of any such matters, neverthelesse, for that men many þeres since haþe vsed, not onely to make fires in Halles and Chambers, for their easse, but are also woltis to make divers ornaments in, and ouer such places; and for that I intende in this Booke to speake of all the Ornamentis that a workeman may haue cause to vse in building, therfore I will shew some forme of Chimneyes or fire places, after the Thuscana maner, as wilbe n̄gðfull in such buildings: the one delicately made without the wall, the other rusticall wo;ke, made within the wall.



The fourth Booke

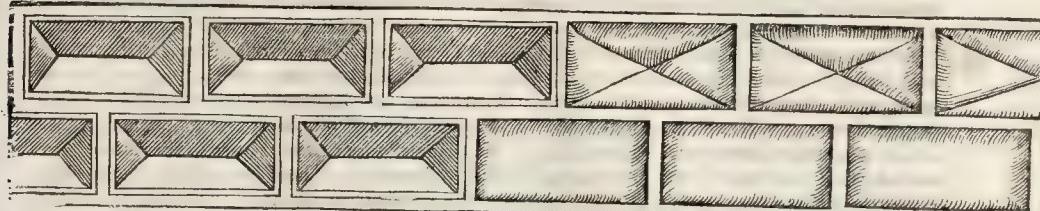
The fift Chapter. Fol. 15

The first rusticall workes were made in this manner, that is, pieces of ston roughly hewen out; but the ioyning together were proportionably made.

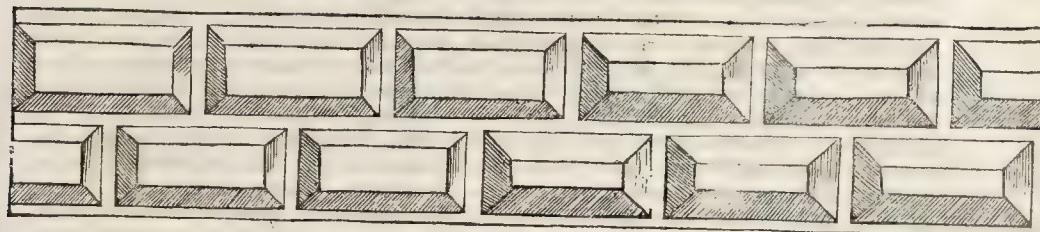


After, they deuided the stones in more proportion and shew, with flat lists, and for more beautie, and for ornaments sake made these crosses in them.

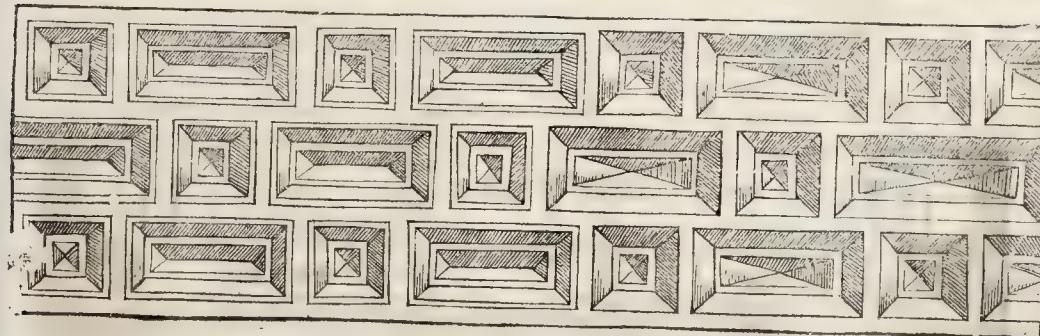
Other workemen brought in wrought Diamonds, and made them decently in this manner.



And in processe of tyme, things altered: workemen, for flat Diamonds, set flat tables, and raysed them somewhat higher, as in this Figure is to be seene.



Some other workemen used more differences and semelyer worke, neuerthelesse, all such workes have their originall from rusticall worke, which is yet commonly called, Worke with points of Diamonds.

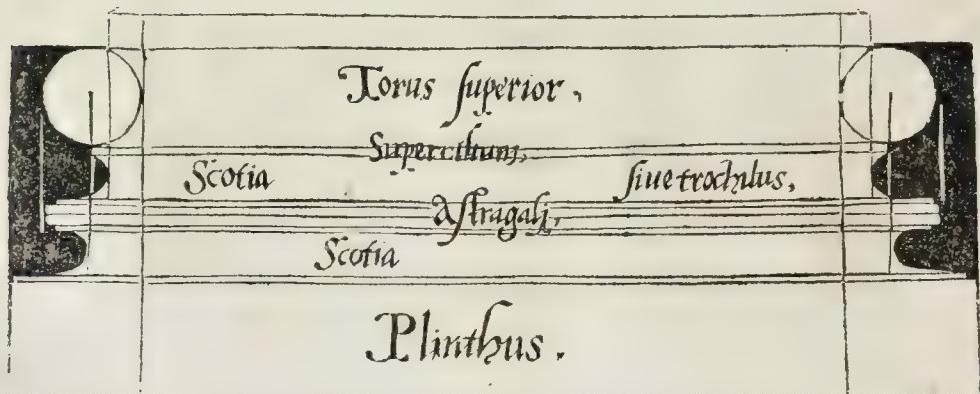


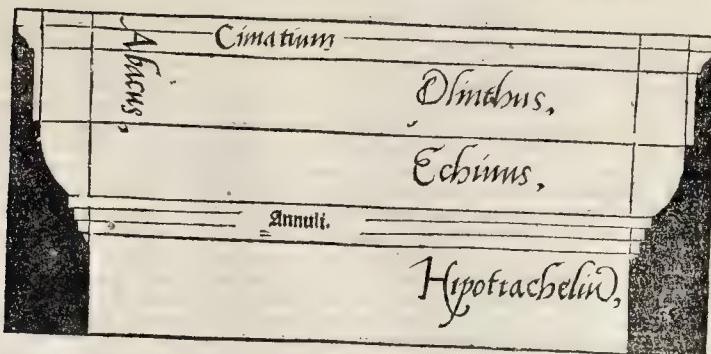
Hære endeth the maner of Thuscian worke, and now foloweth
the oper of Doria.

The maner of Dorica, and the Ornaments thereof.

The sixt Chapter.

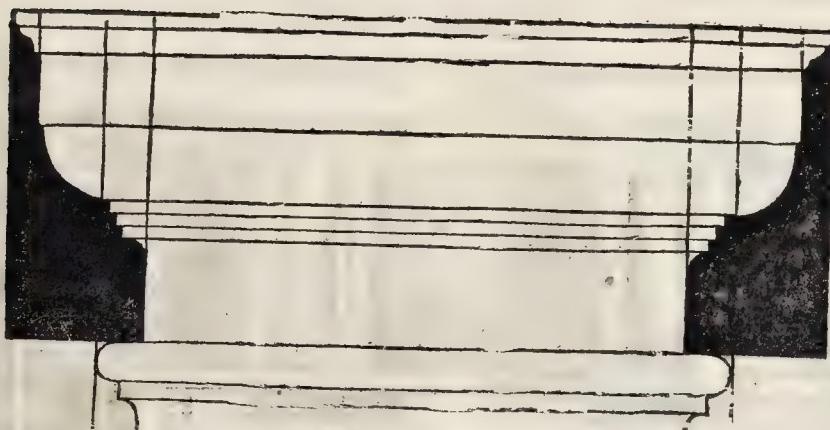
The Ancients (as we haue heard) considering the state of their gods, ordained Dorica worke, and dedicated the same to *Jupiter*, *Mars*, and *Hercules*: but we build Temples, and dedicate them to *Christ*, *Paul*, *Gregory*, and such holy personages, that were not onely professed Souldiers, but also valiantly and boldly lost their liues, and shed their bloud for the faith of C H R I S T . All such belong to Dorica, and not to their gods onely, but to men of armes, and strong personages, being of qualite more or lesse: for whom, if a workeman make or build houses or palaces, they must be Dorica: and the nobler the man is for whom such worke is done, the stronger and statelyer they ought to be; and the more effeminate that they are, the more slenderer and pleasanter the building shall be, as I will shew when time serueth. But now we will come to the maner of the worke. *Vitrinus* speaketh of this Dorica worke, in his fourth Booke and third Chapter: but touching Bases of Columnnes, hee speaketh thereof in his third Booke; although some are of opinion, that he speakest & meanest of the Bases of Corinthia, for that they haue bene much vsed on the Corinthia Columnnes, and Ionica. And some also thinke, that Dorica Columnnes had no Bases, hauing respect to many ancient buildings; as the Theater of *Marcellus*, one of the fayrest works in *Italy*, being the middle downwards Dorica: which Columnnes had no Bases, the body of the Columnnes resting vpon a step, without any other support. There is at *Caser Tulliano* the signes of a Doricall Temple, the Columnnes whereof are without Bases. You may also see in *Verona* an Architryphant, of Dorica worke, where the Columnnes are without Bases. Neuerthelesse, for that workemen haue in former times made the Corinthia Bases in another maner, as I will shew hereafter: Therefore I affirme, that the Bases Atticurgia, which *Vitrinus*, in his third Booke, so nameth, are the Dorica Bases: and this wee see, *Bramant* hath obserued in his Buildings which he made in *Rome*: which *Bramant*, being the light and Inuentor of good and true Architecture, which from Antiquitie to his time (being vnder Pope *Talinus* the second) had beene hidden, we ought to beleue. Then this Base of Dorica shall be the height of halfe the thicknesse of a Columnne: the Plinthus the third part of his height: of the rest there shalbe foure parts made; one shall be for the Thorus aboue: the other three shall be set in 3. even parts: the one for the Thorus aboue, the second for the Trochile or Scotia: but the same being deuided in seuen parts, one part shall be the vppermost list, and another the vndermost. The Proiecture or bearing out of the Base, shall be of halfe the height, and so shall the Plinthus of each Facie hold a thicknesse and a halfe of the Columnne. And if the Base standeth below our sight, the corner vnder the vppermost Thorus, (being of it selfe darkened) ought to bee somewhat lower then the other. But if the Base standeth aboue our sight, the corner aboue the nethermost Thorus (also of it selfe darkened) shall be greater then the other. Thereto also the Scotia, darkened by the Thorus, in such case shalbe made more then the measure appoynted. And in such cases the workeman must be iudicious and wary, as *Vitrinus* would haue him to bee learned in the Mathematicall science, that doth study his Booke.





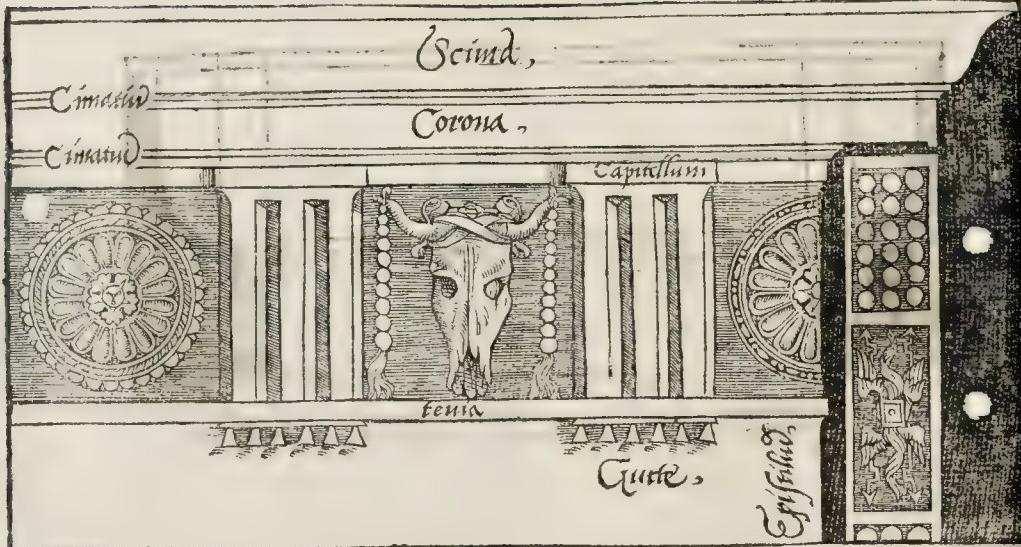
And so that Vitruvius hath deuided this order of Dorica by models, making the Columne of two models in thicknesse, and the height with Capitalis and Bases of 14. Models; so then, the height of the Base is a Model: the bodie of the Columne is 12. models; and the Capital one model, which is 14. models in all: The height of the Capitall shall be deuided in 3. parts, whereof one shall be for the Plinthus, or Abacus, wherein also the Cimatic is to be understand: the second, the Echino with the Annulo: the third, the Hypotrachelio or Frise, which Hypotrachelio shall bee in thickenesse the first part lesse then the Columne below. The heighth of the Capitall in the uppermost part shall be in each Facie 2. Models and a first part: and this is according to Vitruvius writing. Although I am of opinion, that this place is falsified touching the Projecture, which, in effect, is very lame, in respect of that we see in Antiquities; therefore, after this Capitall, I will make another after my fantasie, with the particular measures thereof, better described, so that Vitruvius doeth it to briefly.

The Capitall being deuided into 3. parts, as I sayd before, I say also, that the Plinthus or Abacus shalld also be deuided in 3. parts, one part for the Cimatic with her Rule, List, or Fillet: but the same thickenesse deuided in 3. shall bee the List, and the other two the Cimatic. The Echimus shall also be deuided in 3. parts, and 2. third parts being for the Echimus, and the rest for the Annulo, which shall also be deuided in 3. parts, givine each of them one. The Frise shall bee as the others. The Projecture of each part shall be like the hight: and so doing, it shall bee made by more certaine rules, better, and more easily for shew.



Of the Dorica

Vpon the Capitall you place the Epistilia or Architrave, the height whereof shall be one Podell, and divided in 7. parts, one shall be the Tenia or List: the Gates or small Lists under the Tenia (which Virruinus namet, Sub tenia) are in all, the first part of a modell: which height being divided into 4. parts, the 3. parts shall bee the Guttas, and the other the List. The Guttas shall bee sixe in number, hanging under the Triglyphes. The height of the Triglyphes or Trigliffe shall be one Podell and an halfe, and the breidh one Podell: which heidh divided in 12. on eghther side there shall be one left for the halfe Channels or hollowings, and of the 10. parts remayning, 8. shall bee for the flat of the Triglyphes, and 4. for the Channels or hollowings in the middle. And from the one Triglyph to the other, there shall be the space of a Podell and a halfe: which space shall be right 4. square (by Virruinus named, Ethopha.) In which spaces, as you please, you may set, cut, or graue, One heads, with Dishes, & Platters therunto, placing such things round about their Temples for ornaments. Upo the Triglyphs, you must place their Capitals: the height whereof shall be one first part of a Podell. Aboue the Triglyphes of their Capitals, the Cozona must bee placed with 2. Cimatiess, the one above, the other below: and they both together divided into 5. parts, 3. for the Cozona, and two for the Cimatiess. But the height of them all, shall be of halfe a Podell: upon the Cozona, you must place the Scima: the height whereof is halfe a Podell, and to it you must adde one eight part for the List thereof above. The Projecture of the Cozona shall bee of 3. parts: two bee in one Podell: in the ground of the Cozona, right aboue the Triglyphes, the Gates were orderly set, as you see them in the Figure hanging besyde. Also, betwene the Triglyphes are cut fulmines, that is, winged lightnig: or you may leave the spaces bare. The Projecture or bearing out of the Scima must bee like the height thereof: even so, each part of the bearing out of the Cozona shall have their Projecture like their height. But the more Projecture the Cozona hath, if the stone may beare it, the more statelyer it sheweth. This, we see, that the ancient Romanes did obserue, as shall be shewed when time serueth, both in Figure and measure.

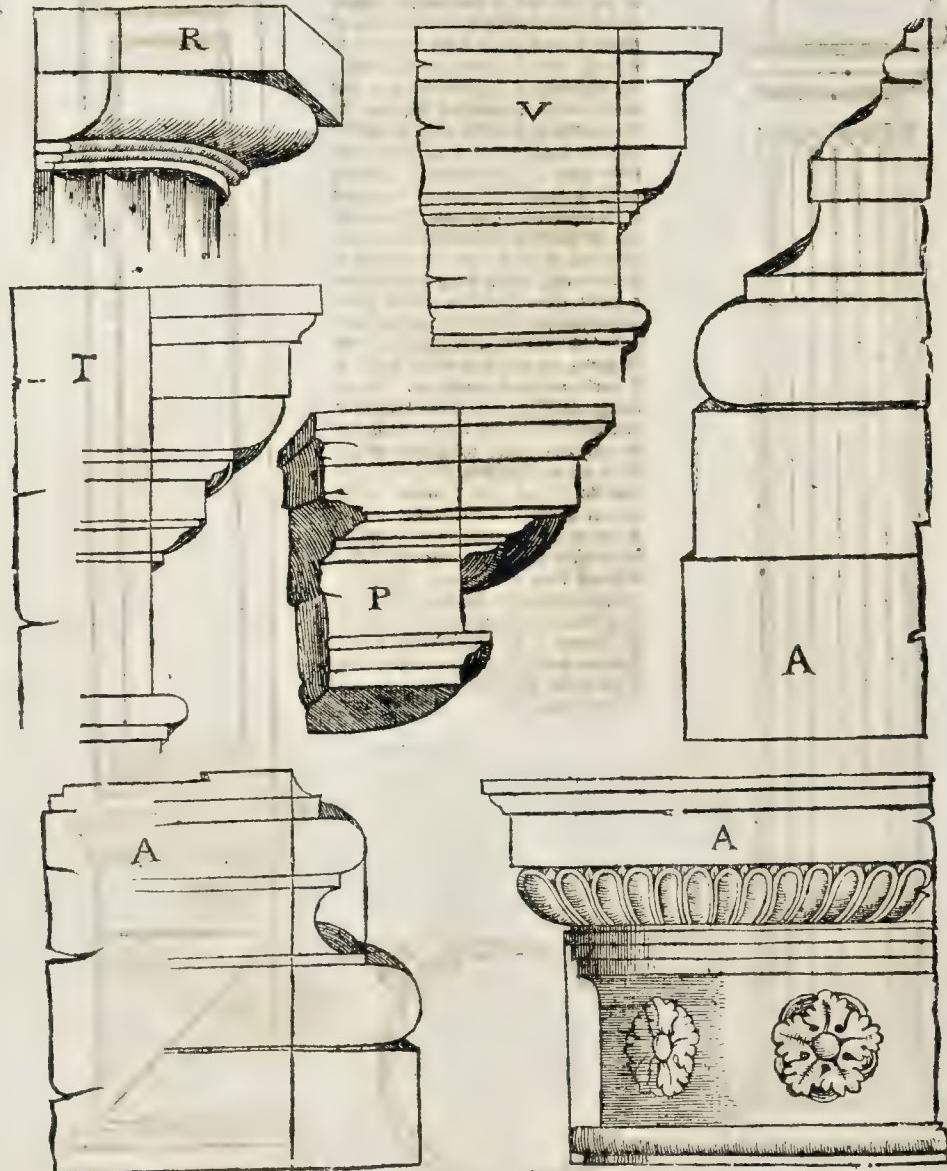


If you will stricke or channel the Columnes, you must make 20. in number, in manner hollowed, and from the one side to the other in the spaces of the stripes there must a straignt line bee drawne, which shall bee the side of one 4. square: whiche 4. square being made, placing the one foote of the Compas in the Center, and with the other touching both the one and the other end of the line, drawing it about, it will make the right hollowing, which shall be the fourth part of a Circle, as it is herunder shewed. And if, for the rasing vp of Columns, or for other occasions, it were necessary to haue the Stilobatum or Pedestall being not high enough, to be made higher, then the flat of the Stilobatum shall bee like the Plinthe of the Base of the Columne: and the heighth, that is, the even or flat shallbe thus: of the breadth shall be made a perfect 4. square; and from the one corner to the other, aline diaconi or Diagonis, and the length of the Diagonis shall bee the heighth of the flat, as you may see it here beneath, which being divided into 5. parts, there shalbe one part set abone for the Cunatic, with that belongeth therunto, and one other part shalbe givene to the Base; and so this Pedestall shalbe of 7. parts, as the Columne is. And although this Projecture of the Capital is contrary to Virruuius rule, because it is Perpendicular with the Plinthe of the Base: yet for that I haue seen the like in some Antiquities, and haue also placed some of the like lost in pieces of worke, I thought it not amisse to set this here, for the use of thole, that will make hys like, althoough some of Virruuius schollers, not haung seene the like in any Antiquities, will contradict it: but if they marke the Abacus of the Corinthia, whose Projecture also hangeth on the Plinthus of the Base, they will not so hastyly reject this Projecture.



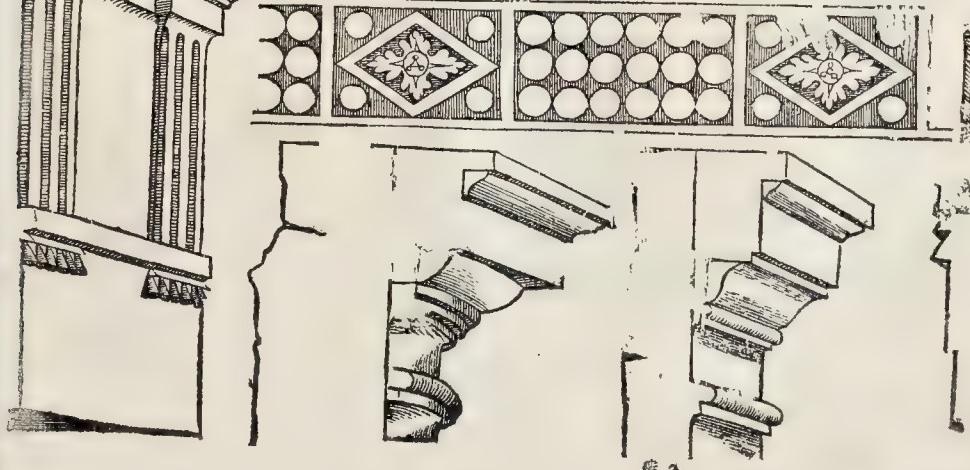
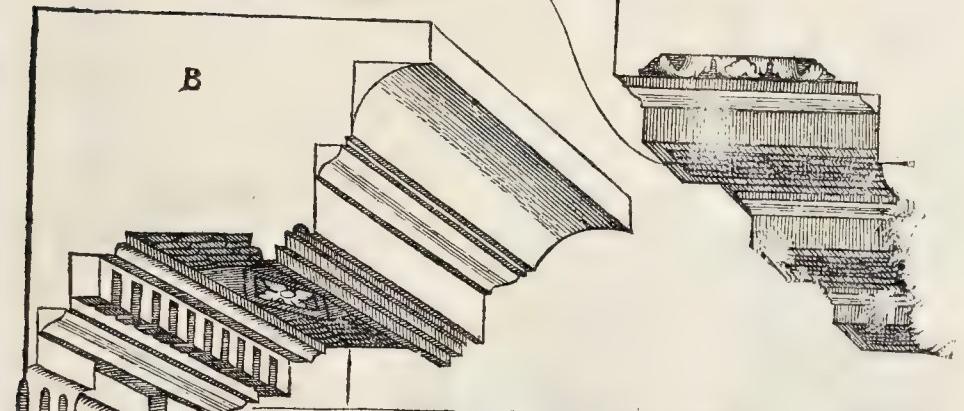
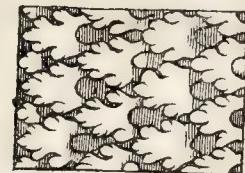
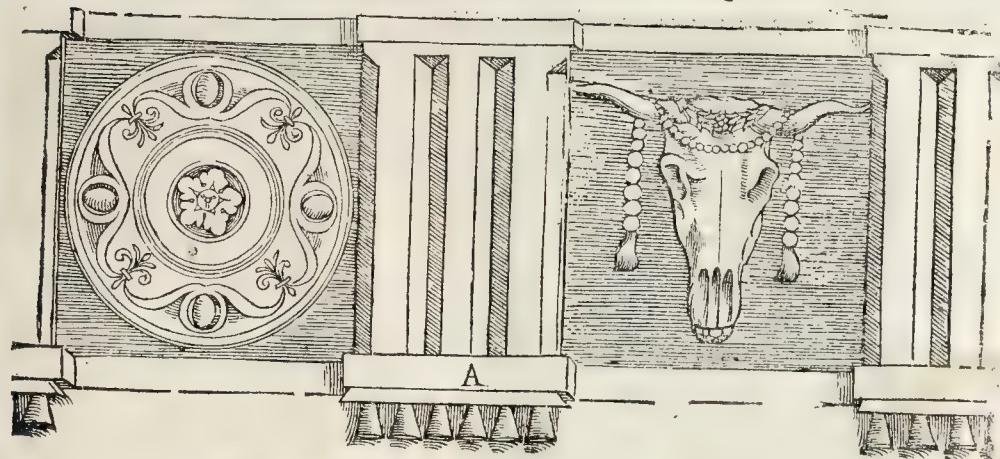
Of the Dorica

For that I find great differences betwene the writings of Vitruvius, and the things of Rome, and other places of Italy; therefore I have here set downe some, which are yet extant in worke to be fane: which, although they bee of small forme, without numbers or measures, yet they are proportioned according to the great, and with great dilgence reduced into small forme. The Capitall R. was found without Rome vpon a bridge, standing over Tiber. That Capitall V. is in Verona, in an Arch triumphant. That Capitall T. is in Rome, in a Dorical Temple, called Al case Tulliano. That Capitall P. was found in Pesaro, with divers other commendable Antiquities: the bearing out whereof, although it be great, yet it sheweth well to the eye. The Balements, or Bases, and Capitall A. are at Rome, in Al foro Boario. The Copice, Capitall, and Imposta of an Arch marked B. are in the Theater of Marcellus. The Cogesse, Frise, and Arbitrare, are also in Rome, in Al foro Boario: which I have shewed, that workmen may chuse that, which likeliest them best. Hereafter I will set downe some particular measures necessary for the workman.



The fourth Booke.

The sixt Chapter. Fol. i§

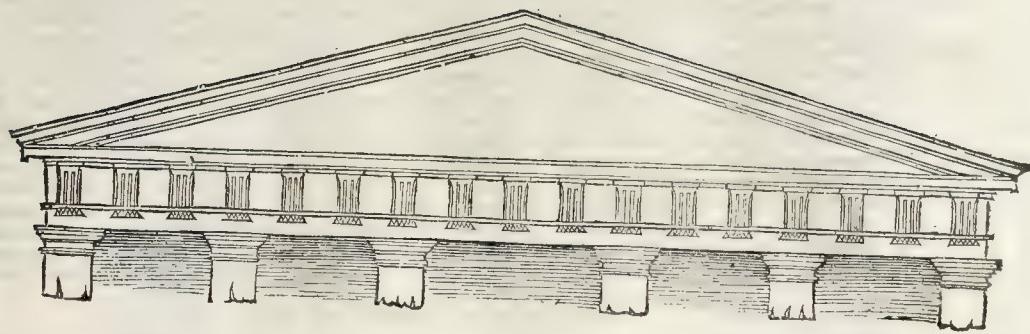


Of the Dorica

The parts of the Triglyphe and Metopon being in this order unprepared, and yet very necessary, I will take paynes to declare so well as I can. First, although Vitruvius affirmeth, that the Models of the worke Heratilis, viz. of sixe Columnes, may be distributed and divided into 35. parts: yet I find not, that the parts may stand so, for this cause, that giuing the middlemost inter-Column 4. Metopon, and the other spaces 3. the said number will not make the whole: but, as I conceave, if you set 42. as you may see, and reckon in this Figure following, as also in the worke Thetruhilis, that is, of 4. Columnes: the Booke saith, that the Forefront of the whole worke shalbe divided into 23. parts, which, I assure you, cannot stand so, if you will giue the middle space 4. Metopon, and the other two eche of them 3. But, by my adice, there shalbe 27. as you may see in the Figure following. Then, if the principall of the Temples be divided into 27. parts, the Columnes shall bee 2. Models thicke, the middlemost inter-Columnes shall be of 8. Models, that is, the thicknesse of 4. Columnes, and the inter-Columnes besides, halfe each of 5. Models and an halfe, that is, two and a quarter, and a quarter and halfe: and so shall the 27. bee distributed. And aboue each Column his Triglyphe being set, & the Triglyphe divided with Metopon, according to the rule aforesayd: then the middlemost space shall have 4. Metopon, and those on the sides shall have 3. The height of the Column, Capitall and Architrave, &c. shall be also made according to the rule; but the height of the Fasigium or Gowell shall bee the ninth part of the length of the Cimatic, that is above the Cozona, setting the measures under the A. upwards to the undermost Cimatic of the Cozona B. The Acroteria or Pedestall marked A. upon the Fasigium shall be halfe the height of the Fasigium or Gowell, that is, of the even o: bat, which Vitruvius calleth Tympanum, and they shall be as broad as the Columne is above, and the middlemost must be an 8. part higher then the other. And so that this Doore or Gate is of Dozia, and is hard to be understood, therfore I will shew in the best way I can, both in writing and Figure. Vitruvius saith, that from the Pavement to the Lacunary, that is, from the ground of the Gallery, to the rofe of the same under A. must be divided into thre parts and an halfe, and two parts shall be for the height of the lighes: so saith my Author, in my opinion. But so that a man cannot so well in a small Figure explayne the particular measures, I will make it more greater and perfecter in the next lease.

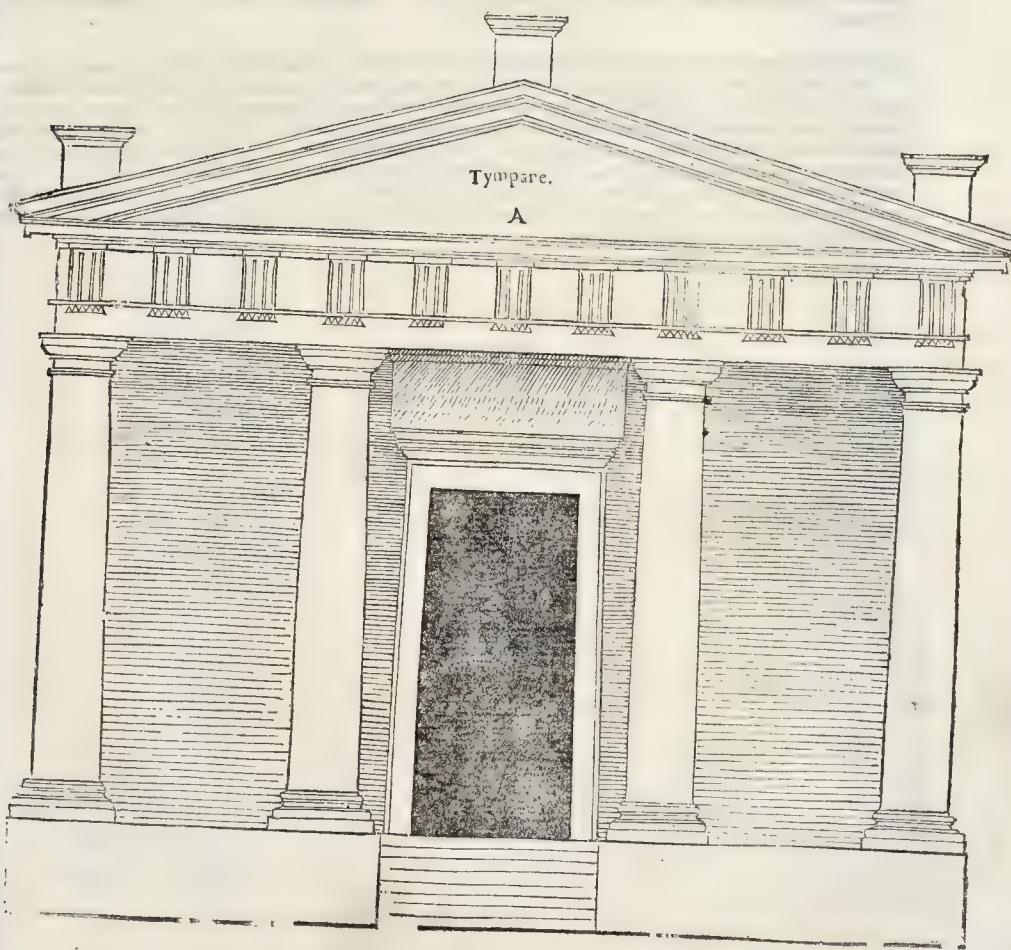
The fourth Booke.

The sixt Chapter, Fol. 19



Tympare.

A



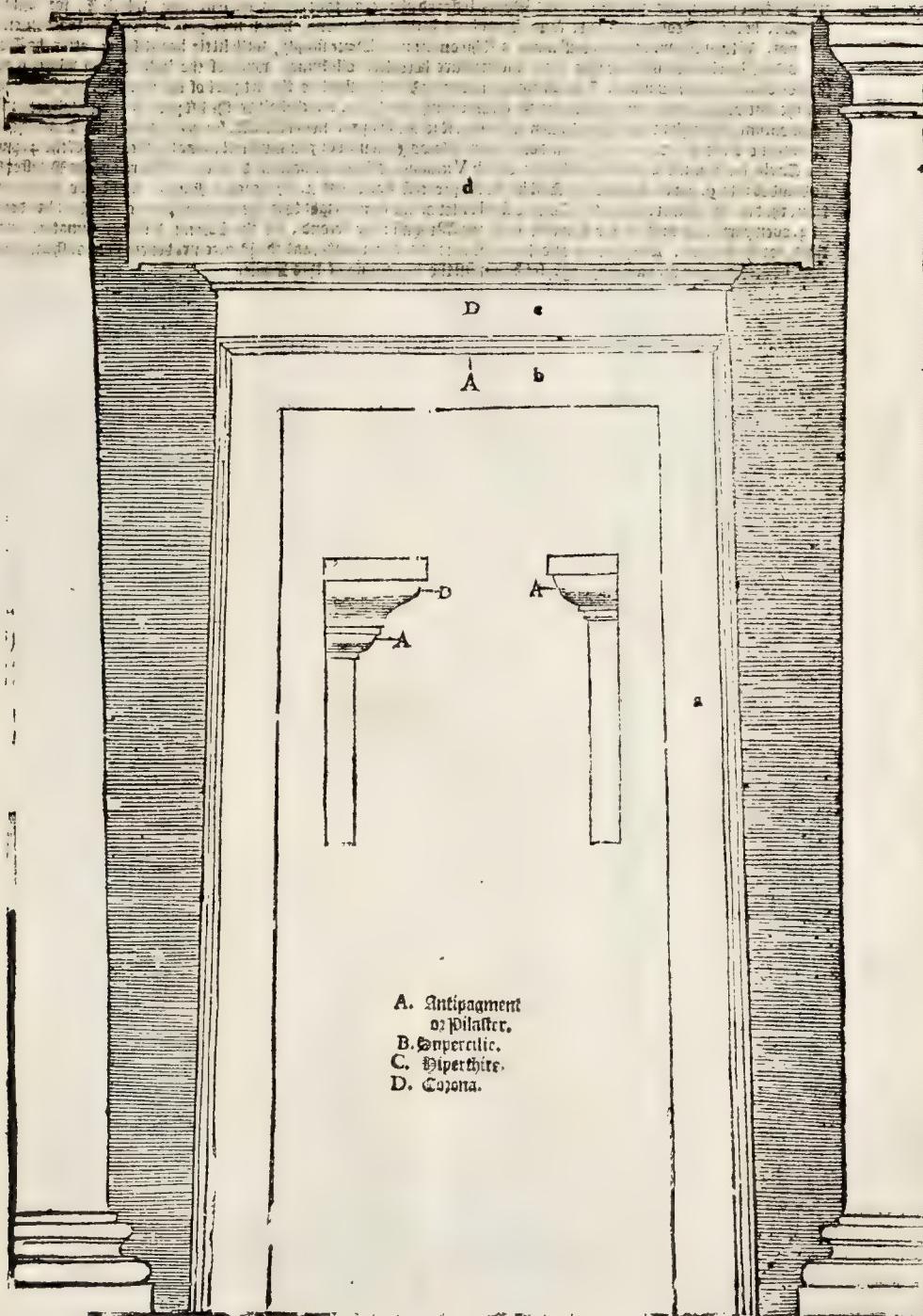
Of the Dorica

Having made (as is before sayd) thre parts and an halfe from belowe upwards, 2. parts shall bee for the height of the light, whiche height being deuided in 12. one part shall be the breadth of the Antipagmentum or Pilaster, and the light shall be 5. parts and an halfe broad: but if the light vnder be of 16. foot, the Pilaster shall be lessened a 3. part in the uppemost part: and the same Pilaster shall also be made thinner a 14. part above. That Superclitic or Architrave shall be of the same height, in the which the Cimatum Lefbium with the Astragalus is to bee made: which Cimatic shall be the 16. part of the Superclitic, I meane the Astragalus Lefbium, as it is shewed in the Figure A. It semeth, that the Author meaneith enely the Cimatic above the Superclitic: but as it is seene in some Antiquities, therefore it is so made, in regard of the Antipagmentum. Upon the Superclitic, in stead of a frize, you shall set the Hypothymum as high; in the which, the text saith, men cut the Cimatum Dozicun, and that Astragalum Lefbium in the Scima Sculptura, whiche is confused. But here I let my selfe to vnderstand, that the meaning of the Author is broken, where he saith, Scima Sculptura: he would haue sayd, Sine Sculptura, that is, withoute culling or graving; and that is, Cimatum Dozicun, together with the Astragalum Lefbium: the proportion whereof standeth in the Figure marked A. D. Now, for that the text saith, that the Cimatic of the Corona shallbe of like height of the uppemost of the Capitals, whiche being so, then the Corona will be very great: to whiche (according to the Authors meaning) I haue givien as much Protection as the height of the Superclitic is. Although such Crownes will never be handsome or seemely in wroke, neuerthelesse, to intrate of the Dymants, I thought good to set downe my opinion herein, and to shew it in figure.

Corrections of the aforesayd text, by H. Sterle.

I have perused Vitruvius writing marrer, and with more deliberation, where hee speaketh of the Cimatic Dozica, and the Astragalo Lefbium, in the Scima Sculptura: and I find, that Scima Sculptura is meant of flat cutting, rising very little: now, for that I haue found many such like in Antiquities, viz. where the Astragals, Leaves, and Egges, &c haue but small or little Protecture or rising vp, therefore I set this for instruction of Translatores, to be corrected touching Boxes.

And so that our Author hath set this correction of the Cimatic and Astragall here, wherein, in my opinion, there consisteth no great matter, I think it not amisse to helpe him a little in this matter touching dozes, wherein consisteth much. For where Vitruvius saith, that you must deuide the part from the Pavement to the Lacunare in 3. parts and an halfe, it must be understand, above towards the Timpanum marked B. and then the doore wchold bee well, and the Corona wchold be like the Plinthus of the Capital. Now, for that the text is so different in other places, as in the middle of the Medels, whereof Cesarianus saith, that he hath found 3. or 4. foote; so it is to bee feared, that this also is not well understood. Thus much I haue (with some licence) thought good to set downe here, that the building should not be left imperfект, as our Other doeth. For although he sets downe the Figures of more dozes, yet he sheweth not how they shall stand in the Building aforesayd.



A. Antipagment
or Plaster.

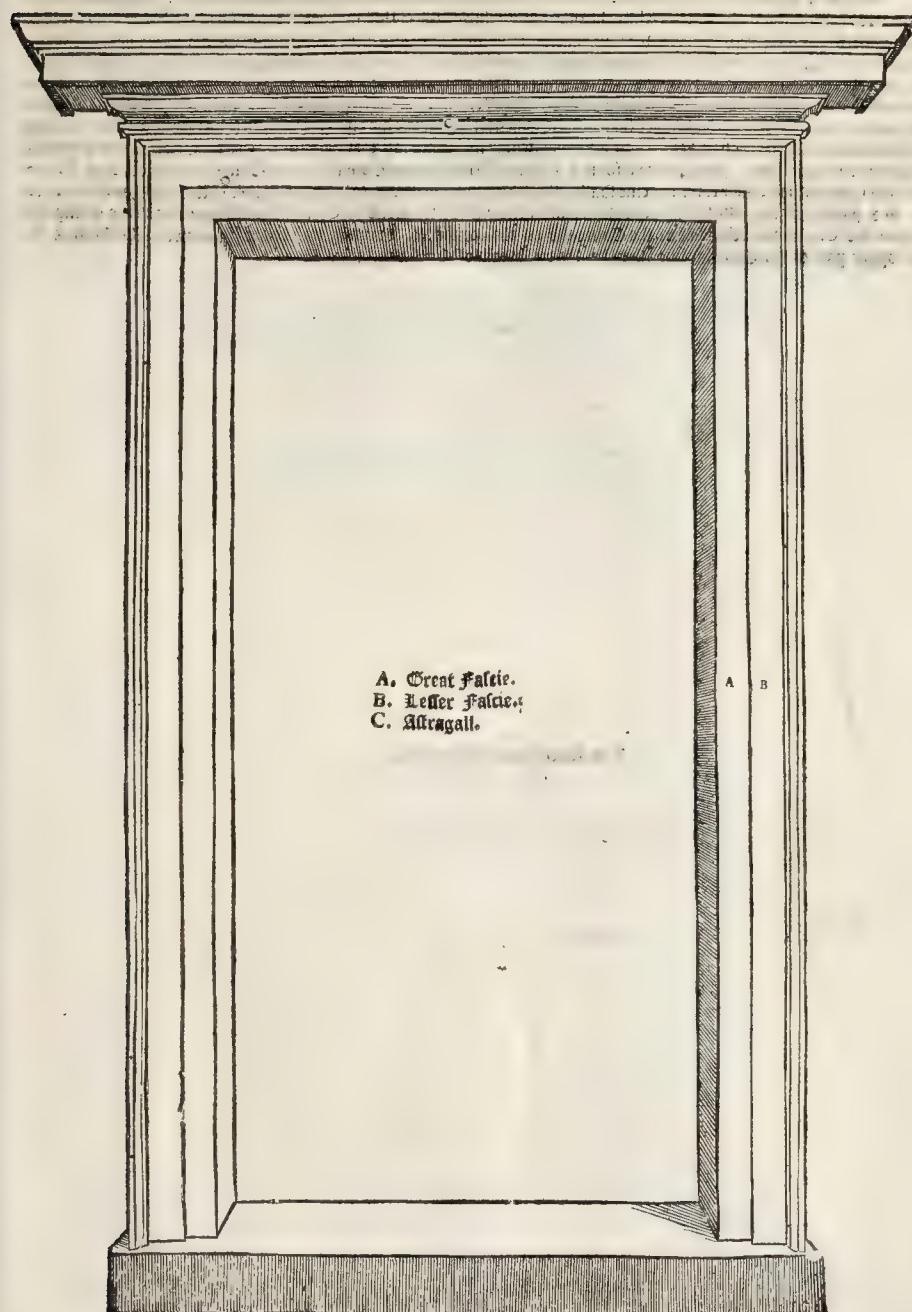
B. Hiperstic.

C. Hiperstite.

D. Cozona.

Of the Dorica

For that men in our time doe not use Dorees lessened above, as they did in ancient time; which I, for some reason, doe not recommend, yet some skilfull workeman haue many, which most part of common workemen like not. If then the workeman will make a Threemastern or Doree simply, with little beautifying, after the Dorica order, then he may obserue this order and measure hereafter following: whereof the light or that which is open, shall be twice as high as broad. The Antipagmentum or Pilaster shall be the first part of the breadth of the light: without the Antipagmentum you must make an Echine with two Lists, which shall be the first part of the Pilasters or Antipagmentum, althoug in the Gate, spokew of before, it is the first part: nevertheless, for that I haue lere in Antiquities, in a meane Gate of 12. parts, I haue done it here also, as I promised: you must not make the Echine of the 4. part of the Circle, but it must be flatter and lower, which Virtuous calleth, Cimatum Lesium. The rest of the Pilaster shall be devided into 9. parts, whereof 5. shall be for the greatest Facie, and 4. for the lesser Facie. Above the Antipagmentum, that is, the Supercilium, the Cornice shall be set of the same height that the Supercilium is, and shall bee devided in 3. even parts: the first, for the Cimatu with the Astragall: the second, for the Corona, with her Climatis: and the third, for the Scima: But there is also the eighth part added thereto, and the Proscenium bearing out or shooting over, shall be according to the rule aforesayd, set downe in the beginning of this Booke.

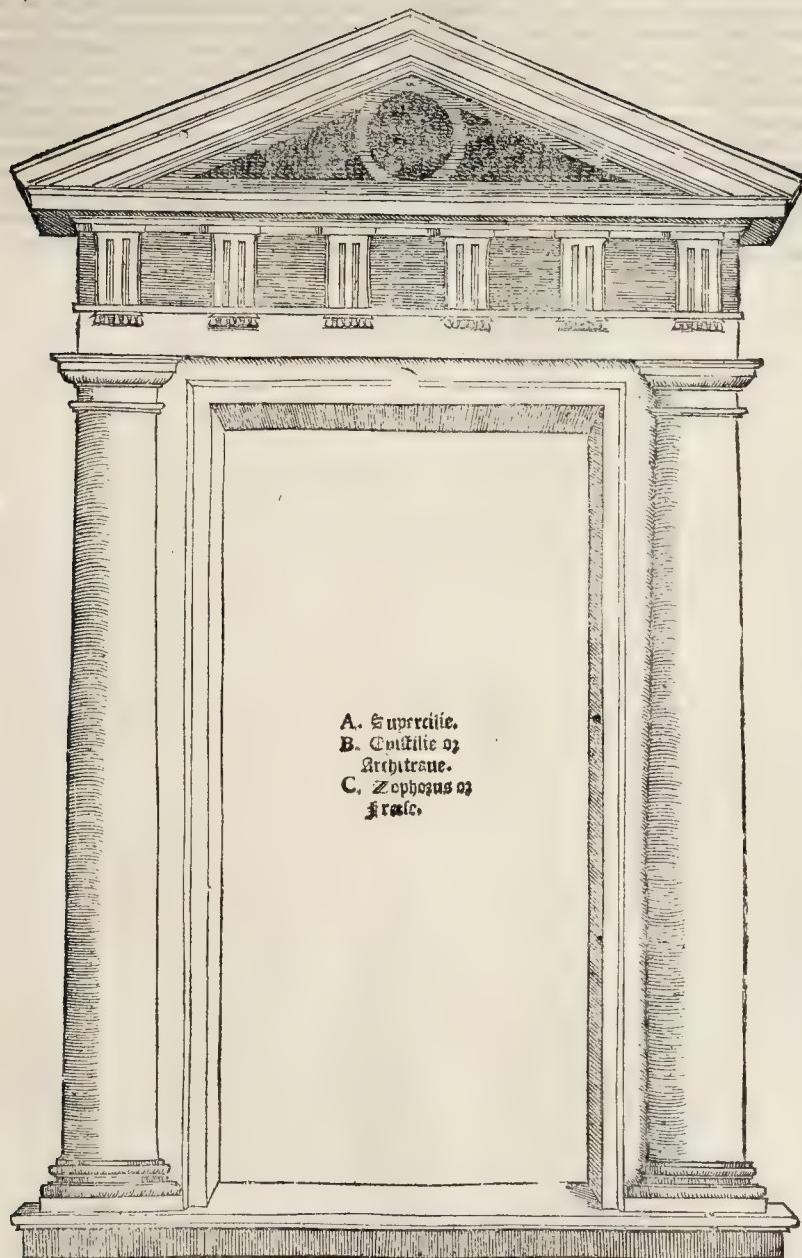


Of the Dorica

ALthough that in the Order of Dorica Vitruvius maketh mention of one Dore or Gate only, and darkly inongh (in my opinion) as I shewed before, I thinke it requisite, that men shall not onely vse one sort of Dores or Gates, but also of divers sortes and fashions, to beautifie a piece of worke, and to please divers mouds: Therefore, when a man will make a handsome Gate, he may follow this Figure: that is, to set the breadth of the Dore twice in the height; and the Pilaster must be made of an eight part of the height, and the Columnes of the third part of the breadth; which shalbe set 9. times in the height: and although it be moze then the measure set down, yet it is not false, because some part is made vp in the wall: also some Antiquities vse it, which in such cases are not overcurious. Upon the Columnes you must set the Architrave as high as the Pilasters or Supercilie. The Frieze halbe 3. parts of the thicknesse of the Columnes, vpon every Columne there shalbe Triglyphes set, and from the one Triglyph to the other, there shall be thre Triglyphes and five spaces deuided. The other particular members, as Vale, Capitall, Frise, Triglyph and Cornice, follow the rule aforesayd. Now, soz that some Falligies, Frontispices, Courerings and Gouells, are higher then Vitruvius lets them downe, their common rule shalbe, that you deuide the Cornice from one corner to the other, as from A. to B. in 2. parts, and the halfe shall hang downwards, straight by the Lead to C. and then the one sort of the Compasse set vpon the C. and the other sort of the Compasse on the corner A. drawing it about to the corner of the Cornice B. that vpper part of the Circular line, shall be the due height of the Falligium or Gouell.

The fourth part of the Circle.



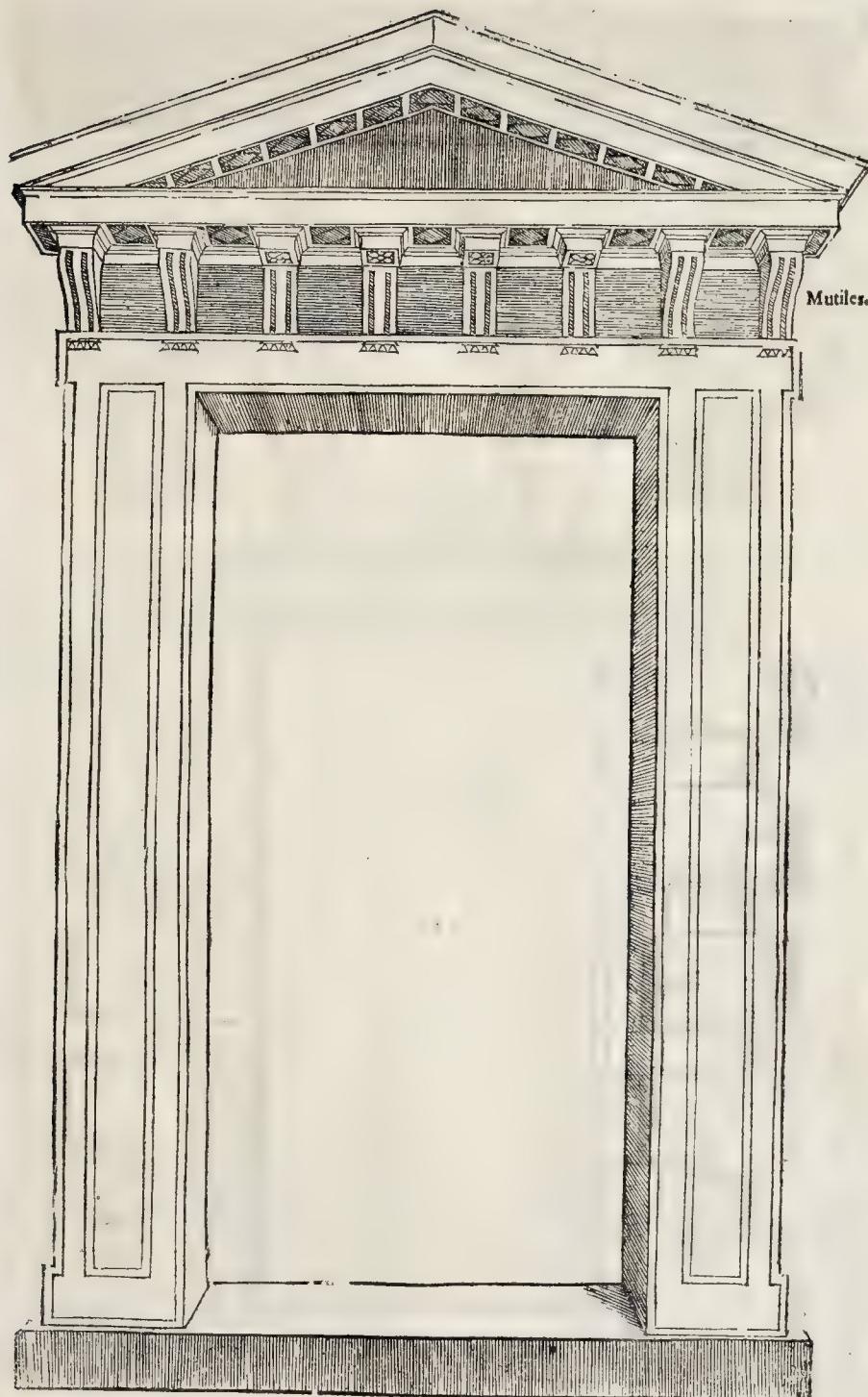


Of the Dorica

A lteration oftentimes is better and more esteemed, then perfect simple forme in her owne nature: therefore it is the moze pleasing, whan a piece of worke is made of diuers members and parts, although of like nature, as you may perceyn in the Figure following, wherein there are Triglyphe and Putiles, all in one oder: which, in effect, I never saw in any Antiquities or writings. But Balchazar of Siena, one that read and sought out all Antiquities, may peraduenture, haue saue some, or at least himselfe was the Inventor; therof, placing Triglyphes aboue the Dore, where they beare leafe strese, and the Putiles aboue the stony part of the Pilasters, which beare all the weyght of the Fasligium, and in my conceyt, samely, and was much commended by Clement the seueny, who, assuredly, was a man excellently saue in all Artes. This part shall haue the light deable proportioned; bat the Pilaster shall be the 7. part of the heighth, and the Superclites the halfe thereof. The bredth of the Triglyphes and Putiles, is the halfe of the Superclites, and the heighth a double bredth, making 2. Putiles ouer one Plaster, and 4. Triglyphe ouer the Dore: the spaces shall be all 4. square. Aboue the Putiles and Triglyphes, you must set the Capitall or Abacus: the heighth or thicknesse whereof, halfe a 4. part lesse then the bredth of the Triglyph, and the Cimatic the 3. part of the Abacus: The heighth of the Corona with her Cimatic, halfe as broad as the Triglyph is, and the Scima also as much as the bearing of the Corona before, shall bee as much as the space from one Abacus to another, that in the ground there may be perfect foure squares: But the Projecture or over-bearing both on the right hand and on the left, halfe halfe so great as before. The Projecture of the Scima and the Cimatic, shall be each according to their heighth. That Fasligium is the highest part, shall be a hilt part of the widenesse, from the one corner of the Scima in the right line, to the other.

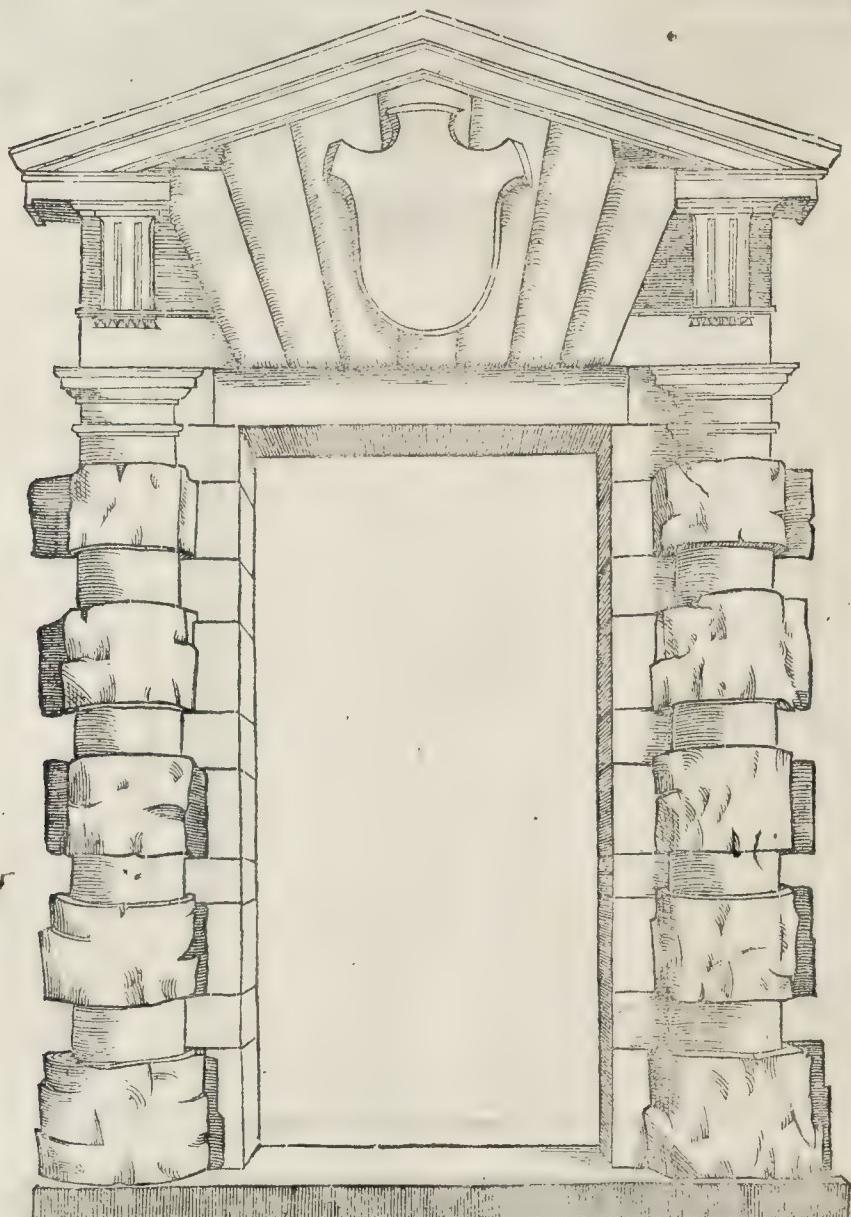
The fourth Booke.

The sixt Chapter. Fol. 23

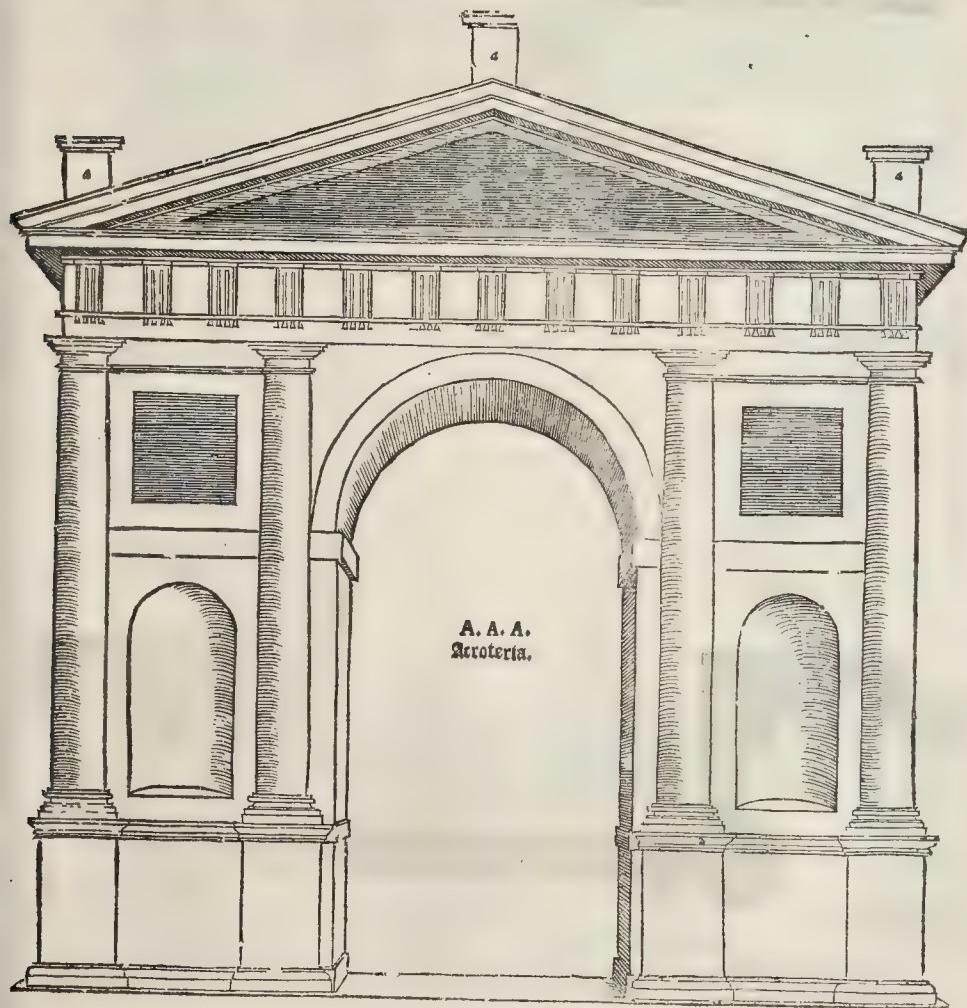


Of the Dorica

ALthough a man may make divers kinds of Gates in Dorica forme, yet for that at this day men couet after monies, especially, when they are made by rule and reason, although the Columnes, Frises and other members are mired with rustical Building, yet herein you may see forme and fashion: and whereas I have sayd, that a man shoud vse rustical and boorish works in foyre and fortresses; now this may serue for a change, but not without, soz receiving of shot in them, &c. The height thereoff is also double in height: the Columnes two times so heigh as the Pilasters, being 14. Footes high, with Capitalis, Erygishes, Faskigum, &c. Let the Reader doe his pleasure further herein, for me thinkes there consisteth little herein, and there is enough layd as before.



My meaning was, in the beginning of this Booke, to speake onely of the ornaments of the five Orders of Buildings, as of Columnes, Pedestals, Episiliums, Zophorus, Comites, Gotes, Windowes, Niches, & such like things. But, after that I determined to augment and enrich this Volumne, in shewing divers Facies or forme parts of Edificies, Temples, Palaces, and Houses, &c. And for that, when as the Columne standeth vpon the ground, they are commendable; yet oftentimes it falleth out, that men haue not their Columnes thicke enough, nor long enough, as they desire, so that it is necessary to place Pedestals vnder them: wherefore I haue made this order following, the proportion wherof shall be as followeth: that the widenesse shall be double in the height: the Pilaster with the Arch, halbe a 12. part of the widenesse: the Columne as thicke againe: the inter-Columne halfe the widenesse of the light of Dore: the widenesse of the Niches, 2. Columnes thicke, and 4. in height: the Pedestals, 4. Columnes thicke in height his breadth, and the rest, as is before sayd. The Columne, with the Bale and Capitall, shalbe 9. parts high: the Episilium is halfe a Columne thicke; the Trigliph of the same breadth, and twice so high with the Capitall. The Triglyphes placed as you see them, the Corona and the rest of the members shalbe made as is before shewne. The height of these Generall somewhat exceed Virruius writing: but I haue seen such an other, somewhat higher, in Antiquities, being made of the sixt part of the Corona in length. The Acroteria shalbe of height and breadth like the Columne abone, without Cornice: and the middlemost a sixt part higher, as also the Columne a 9. part, being made fast in the wall:



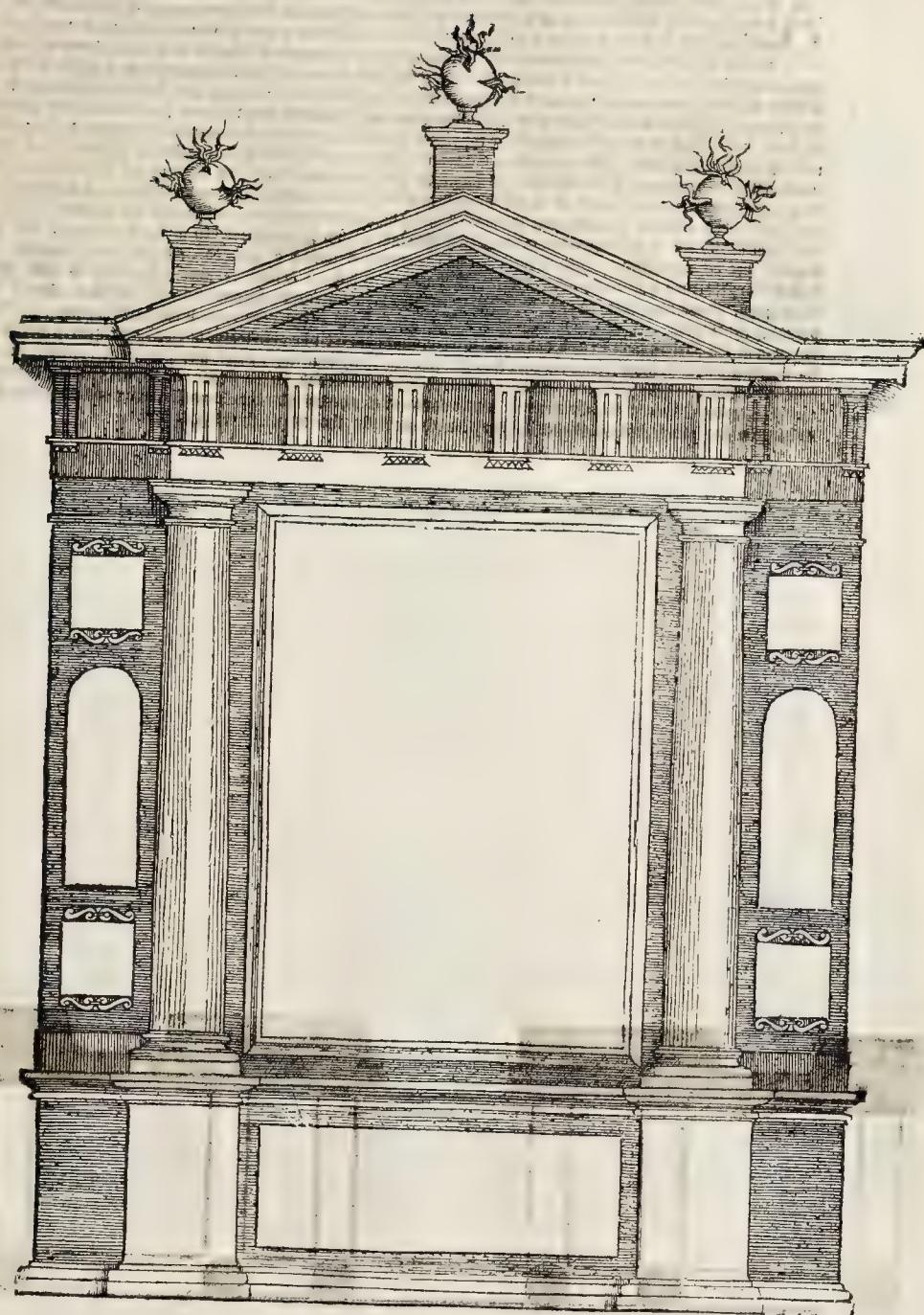
Of the Dorica

This Figure following, may be used by the learned workeman for divers things, and may bee altered according to the accidents that shall happen: it will also serue for a Painter to beautify an Altar withall, as men at this day doe in Italy: it may also serue for an Arch triumphant; if you take away the Basement in the middle. Likewise, you may beautifie a Gate withal, leauing out the wings on the sides: sometimes, for setting forth a Window, a Niche, a Tabernacle, or such like things: Which proportion shall be made thus. The opennesse or widenesse shall bee denideid in 5. parts, and one of them shall be the thickenesse of the Columnes: the Facies or List round about shall bee halfe a Column thick. The hight of the list shall be the thickenesse of 7. Columnes and the Bas and Capitall together, of the thickenesse of a Column, and in all, shall be eight parts high. That Pedestall shalbe 3. Columnes thick in height, the breadth or forepart like the Plinthus under the Column. The inter-Columnes on the sides shall by one Column thick, and in the Corners shall stand the fourth part of a Column: the wings on the sides, wherein the Niches are, shall be of the thickenesse of a Column and a halfe, but the Niche a Column broad, and 3. in height. The Arcitrave shall haue the halfe thickenesse, and the Triglyph also as broad, but the hight without the Capitall shall bee a 4. square, and two 3. parts; wherev^r, placing the Triglyphes on the right side, and on the left, right aboue the Columnes, and betwene both 3. Triglyphes, and 5. Metophores more: the decisions shall rightly come to be 4. square in the spaces. The Corona and the Frontispiece, and all the other parts, as well below as above, shall be made as is taught in the beginning. And for that the Trialphes on the sides differ from Vieruius doctrine; yet, notwithstanding, I haue sette them in Antiquities stand upon the corners, the workemen may, at their good pleasures, make them in wylles, or bate them out, as occasion shall serue. Further, I had no meaning to set any grounds or platformes in this fourth Booke, for that it is intended to be intreated of elsewhere; yet such soffronts as are hard to be understand, I wil set the Technographicie or ground, for moze light to the Reader.



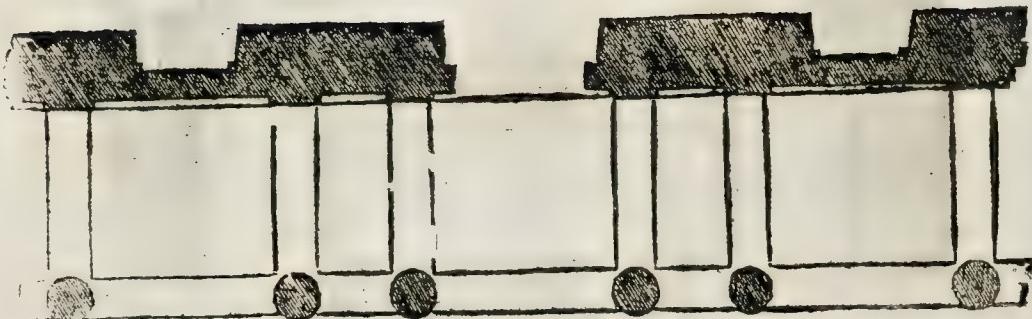
The fourth Booke.

The sixt Chapter. Fol. 15



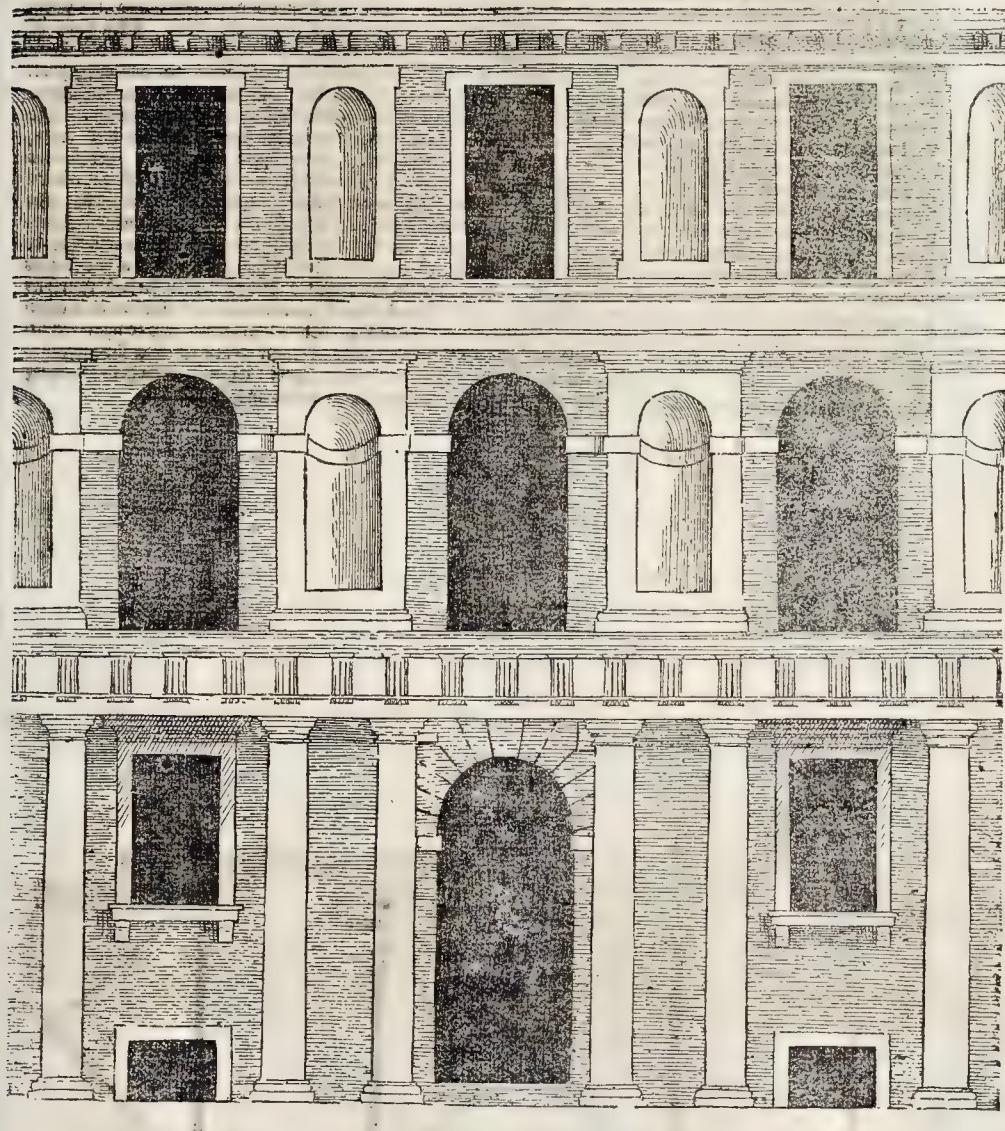
Of the Dorica

Although in Antiquities, as farre as is found, when men had placed the Epistilia vpon the round Columnne, they set nothing else but the Fastigium vpon hat, ving the same order in Churches and Temples, and not in any other buildings. Nevertheless, I will not omitt to set downe some maner of Heales without Arches: for if you will make Arches with the ir four square Pillars and round Columnnes before them for beautifying of the worke, lacking to make much light in your Gallerie, the Pillars with the Arches will binder a great deale of light: Then if you will set the Arches onely vpon the round Columnnes, that were altogether false, for that the soure corners of the Arch would surpass the roundnesse or body of the Columnnes: therefore I intende, to make some Houses and other Buildings without Arches, both of this order, and also of the other. This shall therefore be made in this maner, that the greatest Columnne shall be the thickeſſe, of four Columnnes, and the smalleſſe of one and an halfe. The heigh of the Columnnes shall be of nine parts, with Bases and Capitalis: the Architrave, Freſe, and Cornice, &c. shall bee made according to the former rule: the widenesſe of the windowes are of two Columnnes thicknes: the height of the four square and two third parts: and their Plaſters one fift part of the light, having the Cornice above, like the Capitalis. The doore shall be of the brede of three Columnnes, and seuen in height: and so shall the lights of the windowes, and of the doores, bee all one heigh. The Englyſhed and Pethophes shall bee deuided, as you may perceiue. The ſecond ſtory ſhall bee iole or ſhorter by a fourth part, according as Virtuous giueth counſell: ſo alſo, ſhall the Architrave, Freſe, and Cornice bee a fourth part leſſened: the windowes therof, with the Plaſters, ſhould bee as broad as the lowest. The ornaments in the Niches ſhall come in Perpendicular, with the Columnnes: and the hollowings of the Niches, ſhall be as broad as the inter columnnes: their heights ſhalbe of two ſquare ſquares and an halfe: the third ſtory ſhall be ſhorter a fourth part then the ſecond: The Architrave, Freſe and Cornice accordingly: but being together deuided in three parts, one halfe for the Architrave, the ſecond, for the Freſe and Motilas or Pogdilions, and the third, for the Cornice: You ſhall finde the particular meaſures hereof after the Compotis: the windowes ſhall alſo be as broad as the lowest, but the Niches ſhall be a fourth part leſſe: the rest you ſhall lightly finde.



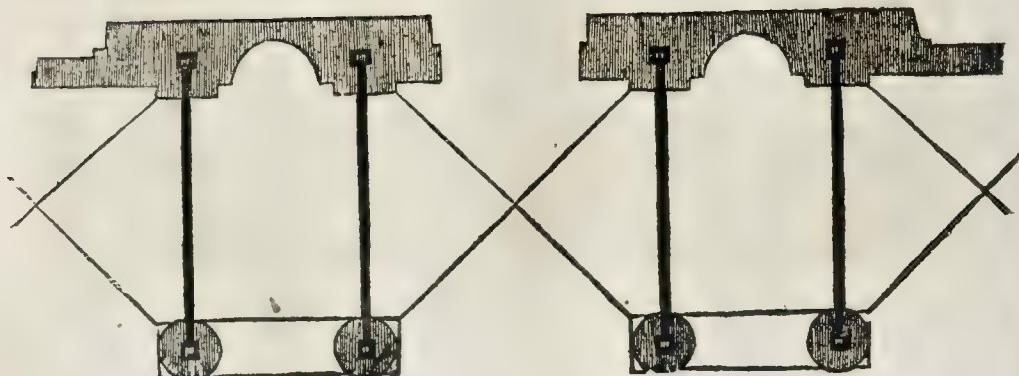
The fourth Booke,

The sixt Chapter. Fol. 26



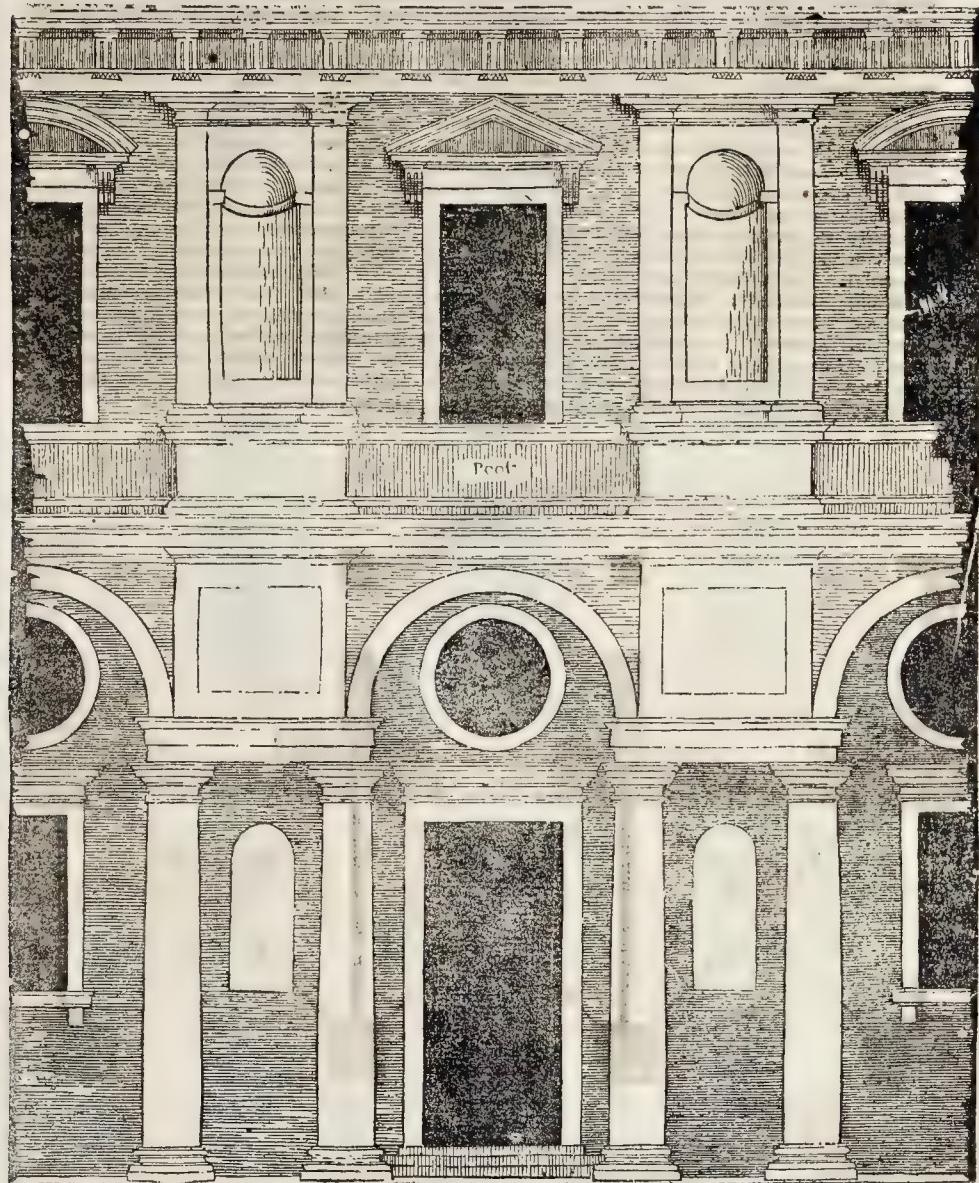
Of the Dorica

Although in the Thuscan Order, in the Facie 13. I haue shewed the like invention, this, notwithstanding, differeth: so that this Gallery would bee round rosed, and where the Arches are, the crossings would be made as you see in the ground. And for that the Columnes cannot uphold the sides, alwaies giuing out, therfore aboue the Columnes, you shall lay 2 fassen Iron bindings, in the sides, as you see it in the platforme, but they will last longer, if they be made of brasse. The proportion of this Facie shall be made thus: The greatest Intercolumnnes shall be 4. Columnes thicke, and the least two. The height of the Columnes, with Bases and Capitals, shall hold 7. times their thicknesse. The Epistilium shall bee thre score parts of a Columnes thicknesse: aboue the which, there shall be a halfe Circle made, the breadth thereof shall be halfe a Columnes thicknesse: vpon the Arch you shall set the Cornice of the height of the Epistilium. Betweene both the Arches there shall be the manner of a window made, the widenesse whereof shall be like the Intercolumnnes vnder it: and the List or edge, as broad as the Arch. That Caunch or Trochle, and the Chyne above the windowes, and part of the Cornices, shall, nevertheless, bee out somewhat aboue the windowes, so to beautifie the same. The widenesse of the Dorees shall bee two Columnes, and one fourth part. The Pilaster or Antipagmentum, shall bee a fift part of the light: the height of the light shall reach to the Superceilie, just under the Capital of the Columne: which forme of Capitals shall followe above the dorees and windowes. The light of the windowes shall bee in breadth two Columnes in thicknesse: but these thicknesse aforsayd, in these cases, are to be understood as the Columnes fall out. The length of the light shall be a score square and a halfe: The Niches shall also be of the same heighth. The Rose aboue, or the seconde Stage, as you will terme it, shall bee leesse or moche a fourth part, deuided in this sort: The Podium or part brewhigh, of one Columne and a halfe in thicknesse. The rest halbe deuided in faine; one of them shall be Architecturall, Frise and Cornice. The Niches with the Ornamente shall stand in Perpenicularl above the windowes, betweene the Arches, but shall be in breadth faine parts: two parts shall be the Columnes, the rest the Niches with the Pilasters. The Cornice aboue the Niches shall be the breadth of one of these Columnes: and the Bases, the halfe breadth thereof. The windowes betweene the Niches, shall in the light contayne one fourth part leesse then the doree, and of double height: but of the rest of the Ornamente (so that this worke is somewhat mixt) you shall find further satisfaction in the Ionica and Corinthia. The Triglypheis in this composition, betweene the one and the other, will not make their Heighnes right score square, because I haue set these Triglypheis aboue each window, and as many over every of the Niches, as you may see in the figure: wherein, if there be any thing wanting in the measure, or else what, I alwaies referre my selfe to the rule set downe in the beginning.



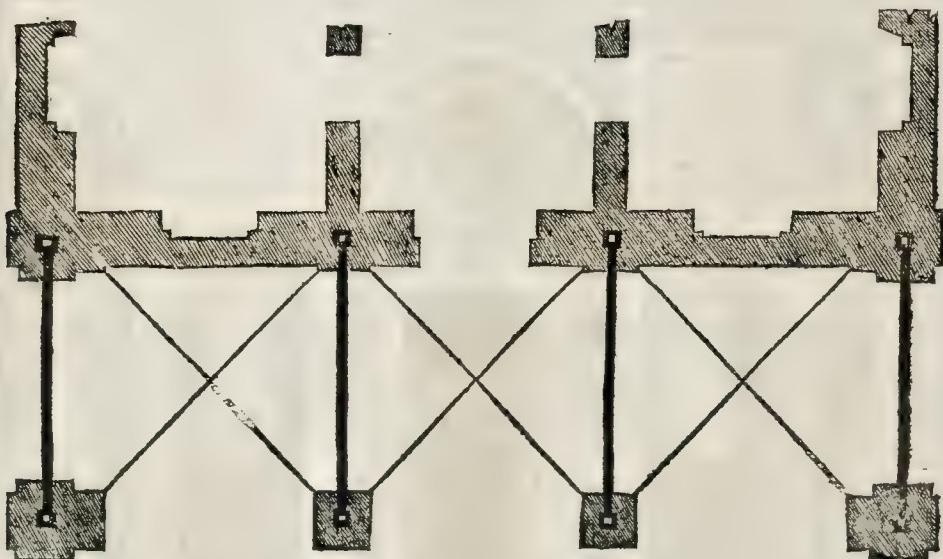
The fourth Booke.

The sixt Chapter. Fol. 27



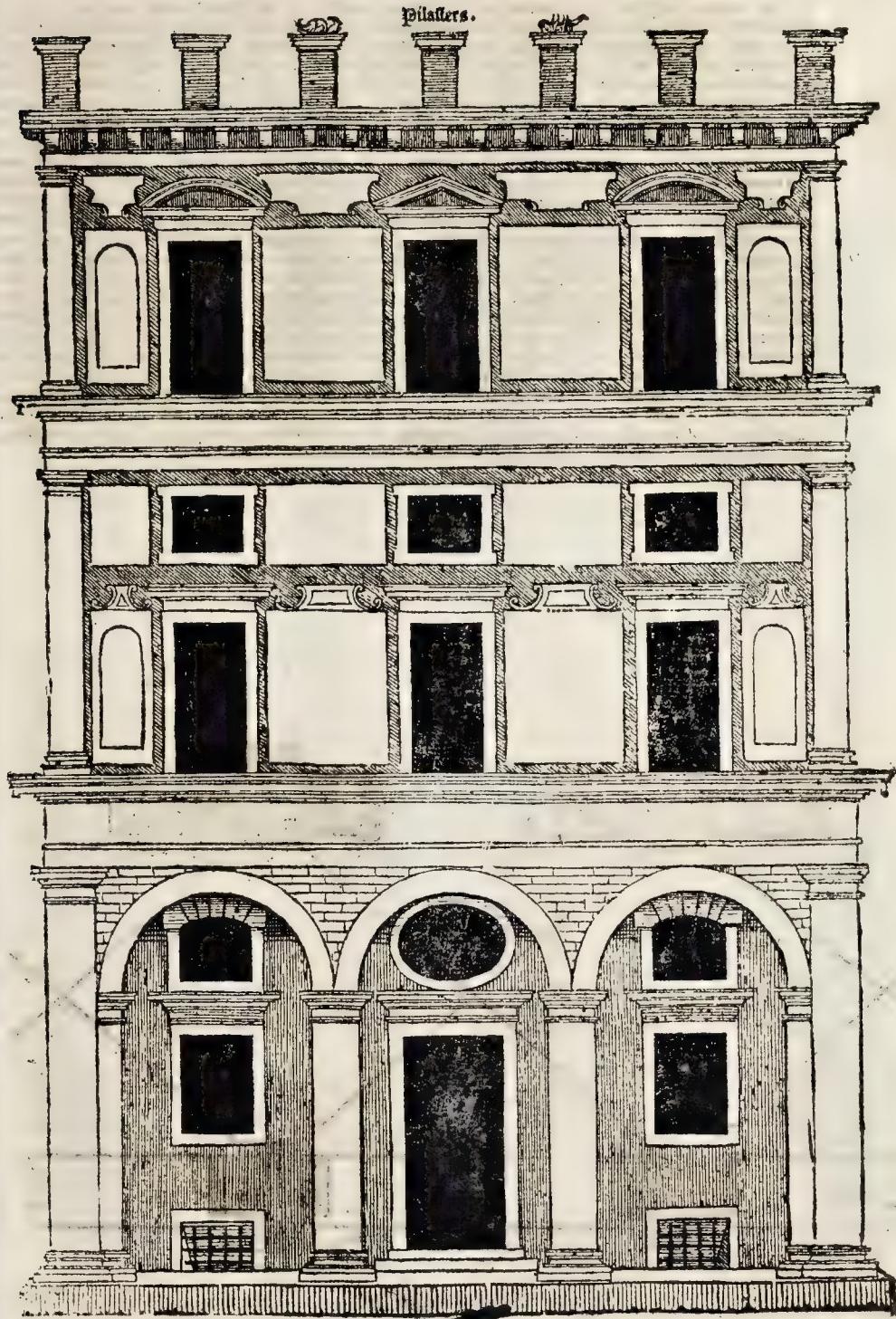
Of the Dorica

For that sometimes, some men will have altogether Arches and Galleries, and for that it is confused woe, to place Arches vpon round Columnes, yet a man may make foursquare Pillars under them with Bases and Capitals, like the other. And althongh this house is whole, which is but little for a man that hath a great stowynge, yet you may set it forth in 5. Arches, all in 7. Arches. The Deuision wheresof may be, that each Intercolumnieng be of the thicknesse of foure Columnes. The height of the Columnes with Bases and Capitals of syre parts: and above them the Arches to be set of the breadth before, or halfe a Columne: the opennesse shall bee of double proportion. Above the Arches you must place the Architrave, Frére, and Cornice: the height of them all shalbe of 2. Columnes thicknesse: and being deuided in 3. parts and a halfe, one part shalbe the Architrave, halfe a part for the Frére, and one part for the Cornice: for the other part you shall follow the rule aforesayd. The doore shalbe two Columnes outward: the Plaster, the first part of the light: but the Corneres of the doore, and the windowes, shall haue the height of the Capitals. The windowes shalbe a Columne and a halfe bearing out: and their length or height, shall be taken in Diagonall manner. The corner Columnes shalbe as broad as the other: but they shalbe of 8. parts and a halfe high. The second story above this, shalbe a fourth part lesse: the corner Columnes, with Architrave, Frére and Cornice, lessened accordanctly: The windowes above the Arches, with the Pilasters, shalbe as wide as those below: but the height of the 2. foursesquares, and the Frére above them, shall bee as broad as the Superclitun: the Cornice also as much: The small windowes aboue them, are made for two purposes: The first, the Rumes being high, as they shew outwards, will make the chambers and other comes much lighter. Secondly, for necessitie a man may make hanging chambers in them, and then those lights will serue to god purpose. The third story shalbe lesse then the secound a fourth part: and the same being deuided in 5. parts, one part shalbe for the Architrave, Frére and Cornice: and that part deuided in 3. one part shalbe for the Architrave and Frére, and the thirs for the Cornice: and in the Frére, the Pilasters and Dogonilions shalbe deuided, as you see them. The lights of the windows shalbe as the others, but they shall bee a twelvth part higher, because they are further from the sight: the Pilasters, Frére and Cornice, shalbe like the other. The Frontispice and Arches shall be made, as I haue sayd, in the doore and gates of the Porter of the Dojica: for beautifying, or to place another row of Arches in it, you may set Acroteries or Pilasters vpon them, which will passe well in the making of their syre places, or chimneyes for auoyding of smoke. The spaces betweenne the windowes, that remayne white, are left to bee painted, as the workeman will, or at the pleasure of the owner of the house. But for more security of this building, it shalbe necessary to place these Iron bands in it, or at least, over the Gallery, as is taught before.



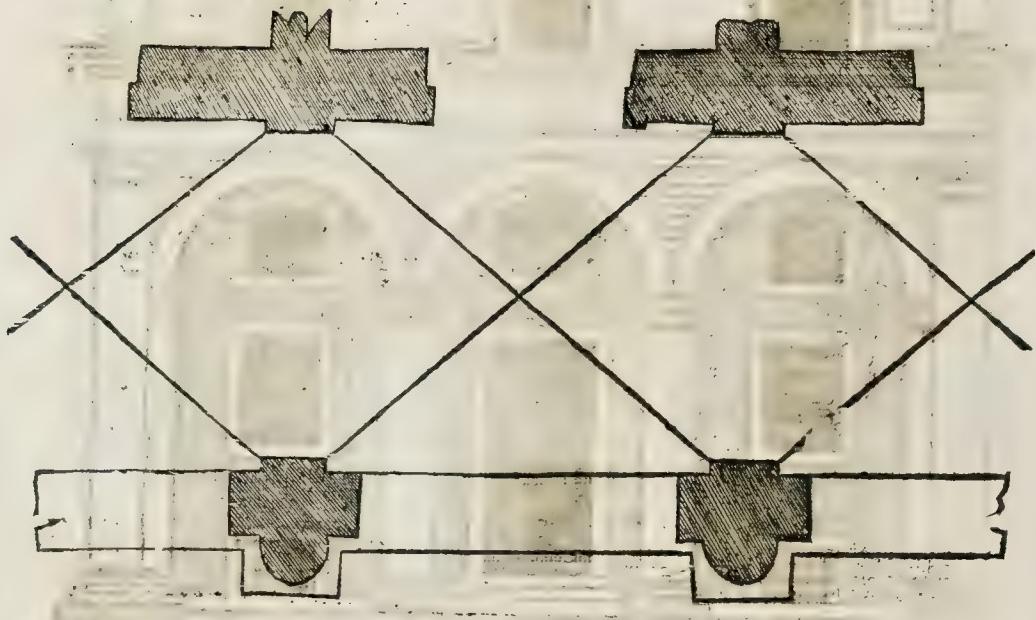
The fourth Book.

The sixt Chapter. Fol. 28



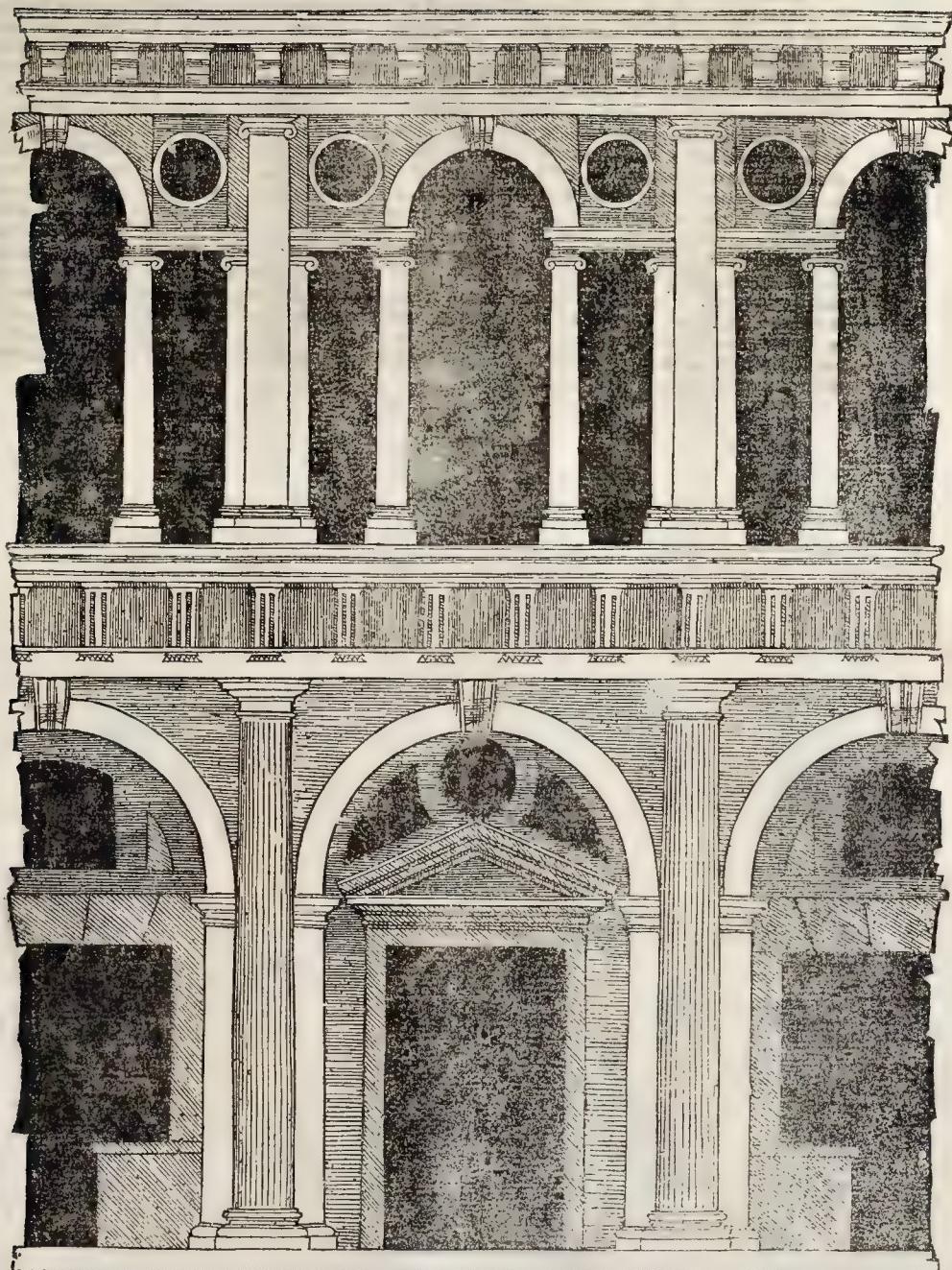
Of the Dorica

In the famous Towne of Venice, because houses stand nere together, they are forced to make their lights as they may, so that their Building differeth much from that Building of Italy: notwithstanding, the workeman may giv them light enough, obseruing Antiquitie, which shall be thus made and deuided: You shall deuide the widenesse of an Arch in 2. parts and an halfe: wherof one shall be for the brede of the whole Pillar: the thickenesse whereof shalbe the halfe, the round Columnes also as much: the height of the Arch shalbe of one 4. squares, and two 3. parts: you may also make them of two 4. squares, heightning the rest accordingly. The Impost or Capitall vnder the Arch, shall haue the halfe thickenesse of the Columne, according to that which is shewed before, of the Theater of Marcellus. The Dorne shall be of thise Columnes thick in widenesse, the height of a four square and two 3. parts: the Plaster or Antipagnumentum shalbe of the 8. part of the light: the Corona shalbe like the Capitall: but the Columna being set vpon it, you shall make the Fastigium as is before sayd, and aboue it give more or lesse light, as the house requireth. If the building stand in a field or an open place, you may kee stops, whiche shall well fall out with the building: aboue the Columnes, the Epistilium must be set of halfe a Columne thickenesse: the brede of the Triglyphe also as much: the height shall be made more or lesse, at the workemans will, that the spaces may be 4. square, wherenpon you muste let the Cornice of a 6. part higher then the Epistilium: the particular parts and measures, you shall make according to the rule before set downe. The Rooy above shall be a 4. part lesse, making a Plinthus vnder the Columne, of such a height, as the Projecction of the Cornice beareth: the rest must be deuided in 5. parts, one part shall be the Architrave, Frieze, and Cornice, (which, as before is taught) shall also be deuided in thre parts. The Columnes which vppole the Architrave, shall bee nine parts high, the lesser Columnes which vppole the Arch, are thinner then the rest a third part: the spaces in the middle, vnder the Arches shall bee twice so wide as the sides: so then, the Cornices being placed vpon the Columnes which bear the Arch, and the halfe Circle made vp to the Architrave, also, the eyes or holes besides the Arch, i. on it will bee exceeding light: and where there wanteth a Chamber, you may shut the middlemost lights, and the sides shall serue for windowes. Penerthelasse, this oder being obserued both without and within, it will not stand much amisse; for the place wherby, shall be for a Fire place or Chimney, which ought always to bee made betwene two windowes, like to a mans face, where the windowes are the eyes, and the Chimney the nose, whiche alwayes drakes the smoke.



The fourth Booke,

The sixt Chapter. Fol. 29

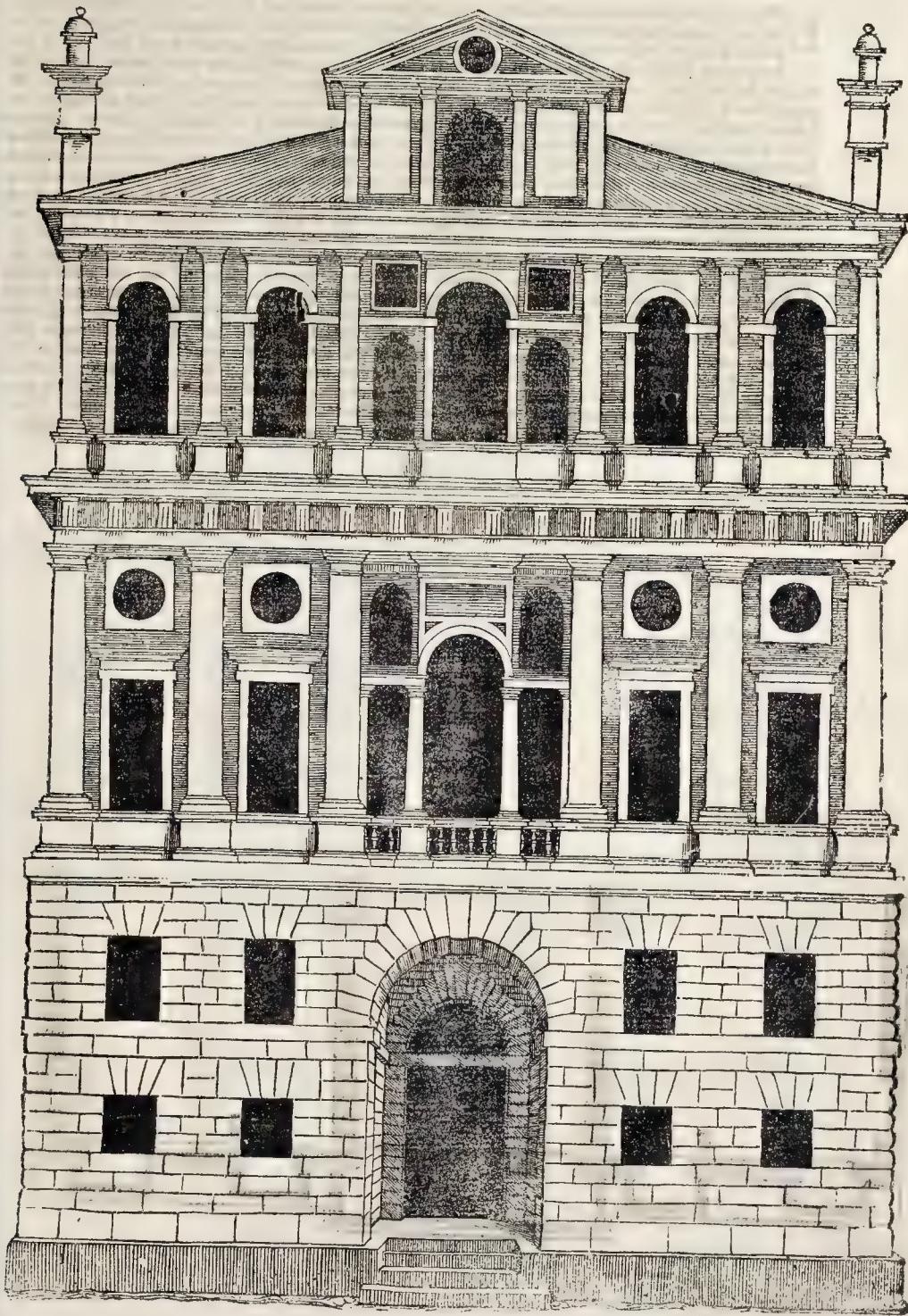


Of the Dorica

To deuide this present Facie, saysh the Author (for otherwise he maketh no preface) you shall deuide the bzedith in 14. parts, and one of these parts shall be for a Columnne: the middlemost inter Columnne shall be of 5. parts, and the other each of 3. parts: the windowes shall be of a Columnne and an halfe: the height of them, two 4. squares and an halfe. The Pilasters shall be of the first part of this light: the windowes in the first story are of the same bzedith: the nethermost, shall be a perfect 4. square, and the other of a 4. square and an halfe. The post or Gate shalbe 5. Columnnes wide, that the Columnnes may have a fast foundation: the height of this Gate is a 4. square, and of two 3. parts: the Arch-vanes, and the rest, you shall see sufficiently in the Figure; from below under the Arch, vntill you be aboue the Facie, shall be 2. Columnnes thicke. And although that all other stories or buildings, being one story aboue another, would alwayes bee shoztened a fourth part: yet in this case, (by my aduise) for that the compartition of the Columnnes, being above this rusticke woorke, and that the rough woorke shold not take too much place when it is of sufficient strength, it is requisite that it shold bee of the same height. Aboue the first order, as you shall make a Podium of a Columnne & an halfe high, whereon you must set the Columnnes in order (as it is taught) the height without the Podium shall be deuided in 5. parts, whereof 4. shall bee for the Columnnes, the other for their ornaments, whereof the Triglyphe shall be deuided, as you see, obseruing his rule aforesayd. The middlewall shall be deuided thus, that the small Columnnes shall be the halfe of the greater, and the middlemost inter Columnne shall be as broad againe as those that stand on the sides, which shall be like eyes of the windowes. Aboue the windowes, to make more light, you shall make the eyes, and aboue the smalles spaces in the middle, you shall make that you see here in the Figure, for to accompany the same eyes. And although there rest particular parts, you shall alwayes seeke them forward, where you shall be assured to find them. The third order or story, and that which belongeth thereto, shall also be made lesse a 4. part; but the windowes as broad as the louell, as also their height, and all other things, you may easly finde with the Compasse. The rasing up in the middle without the Frontispicium, shall bee halfe the third order in height: for the rest, a wozkeman may adde and diminish at his pleasure.

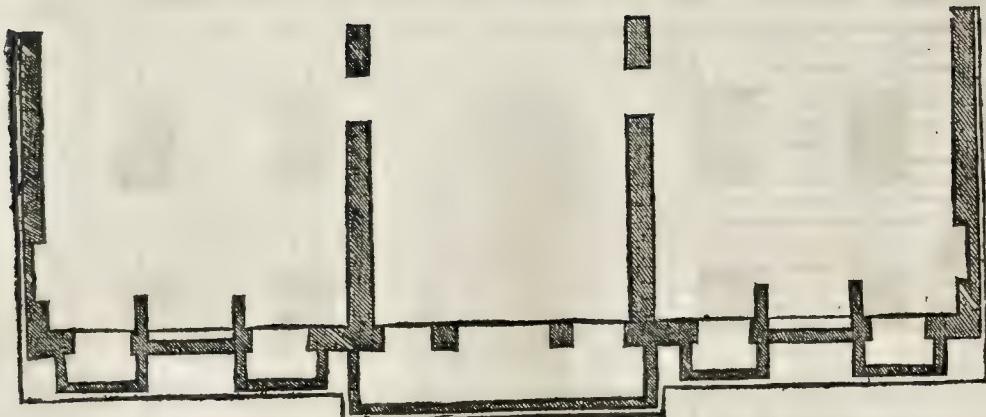
The fourth Booke.

The sixt Chapter. Fol. 30



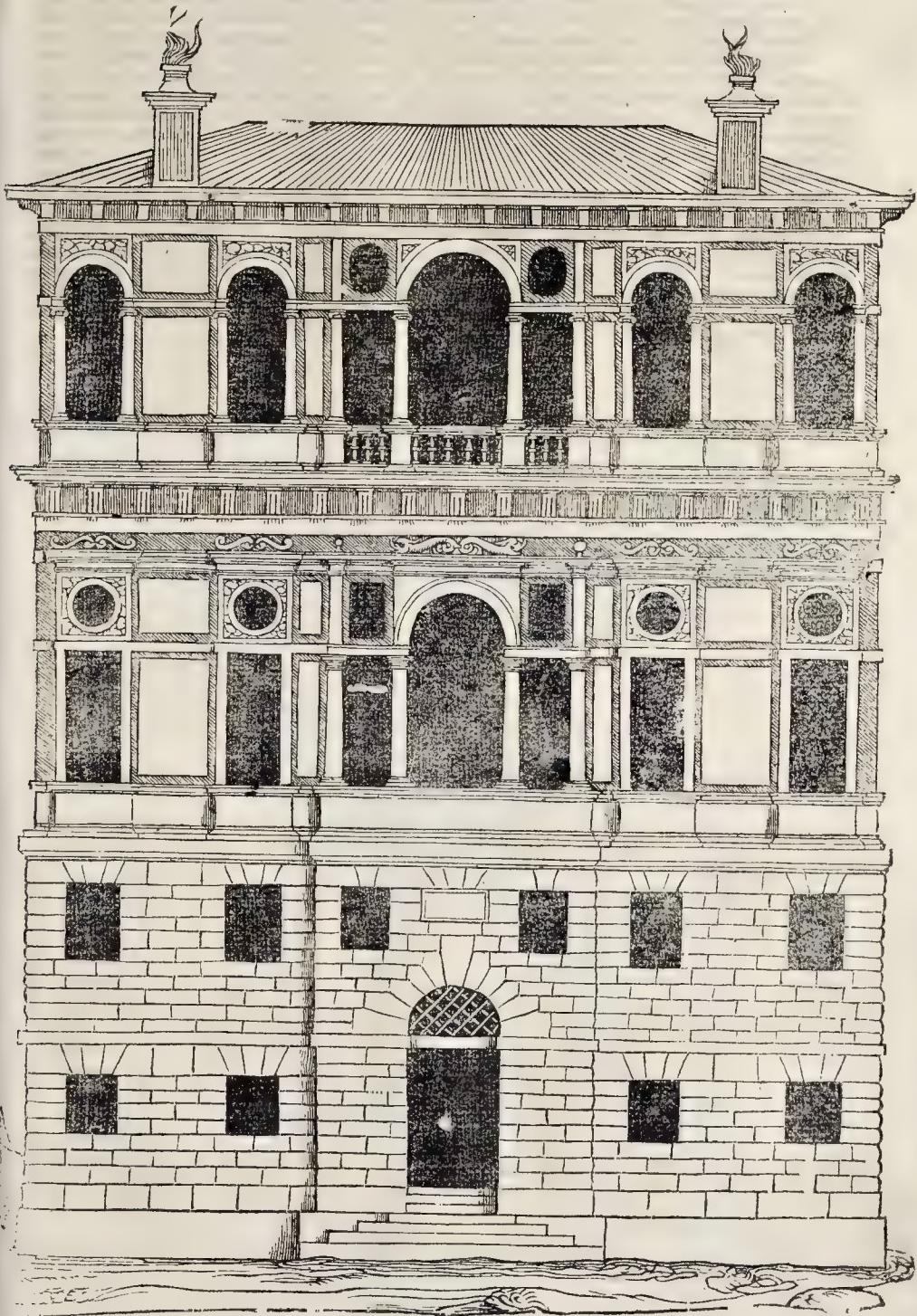
Of the Dorica

Besope, I have shewed in two figures, how to make the Facies or forefronts of Houses after the Venetians manner: but so that such houses men would willingly haue some places bearing out, which are, for the most part, made ouer the water, so fresh ayre of the water, whereon the most part of buildings haue their sayntz forefronts or Facies; as also, to set the tryumphes oftentimes made there in Boates and Ships: to which purpose, the sayd bearings or intypings out serue well, and yet neverthelesse, are unseemely things, and haue no other supporters but the Pogillions: Now, such things as haue not their foudation strongly lapt and made, hurt the walles of the house or building, wheresof ancient workemen were very carefull, and made no such bearing out, but onely Cornices: therefore I say, if a man will make any such things in any building with good aduise, it is necessary that the first wall shold bee so thicke, that it may stand so farre out as the flat of the bearing out requireth, as may bee perceyued in the round: and soz that the middlemost wall standeth out more then the sides, if you will not make it so thicke, then you may make a strong Arch within, to uphold the middlemost, although it be holloow and of small waight. This bearing out, is to bee understood aboue the Facies of the rustical ioyke: which being made, then the compartment of the Facies shall bee aboue this, so that the middlemost part shall be of thre portions, and the sides of thre and an halfe, I meane within the walles, as the ground sheweth. The height of this second order or story, shall be like the undermost, according to the rules aforesayd: and first, you shall make the Portion of an indifferent height, to leane upon: then that which resteth shall be deuided in three parts, one of those shall bee the Epitulum, with the rest of his parts. The widenesse of the middlemost part, must be thus: the openness with the Arch must be as great againe as the sides, and the height doubled; to the Architraves being set vpon the Columnes, for the upholding of the Arch, all the Windowes shall bee vpon a caske: likewise also, for more commodite of light and ornament, the eyes of the Windowes shall bee made. These ornaments, together with many other things, if a man, in regard of cost, will not make them of Marble, or of other stones, they may be set forth with painting. The third order or story shall also bee a fourth part lesse then the second: and so every other part thereof accordingly, following the rule aforesayd: and although the Ionies be set before the Dorica, which ancient workmen sometime haue done, you shall find the proportion thereto heraftir in his place.



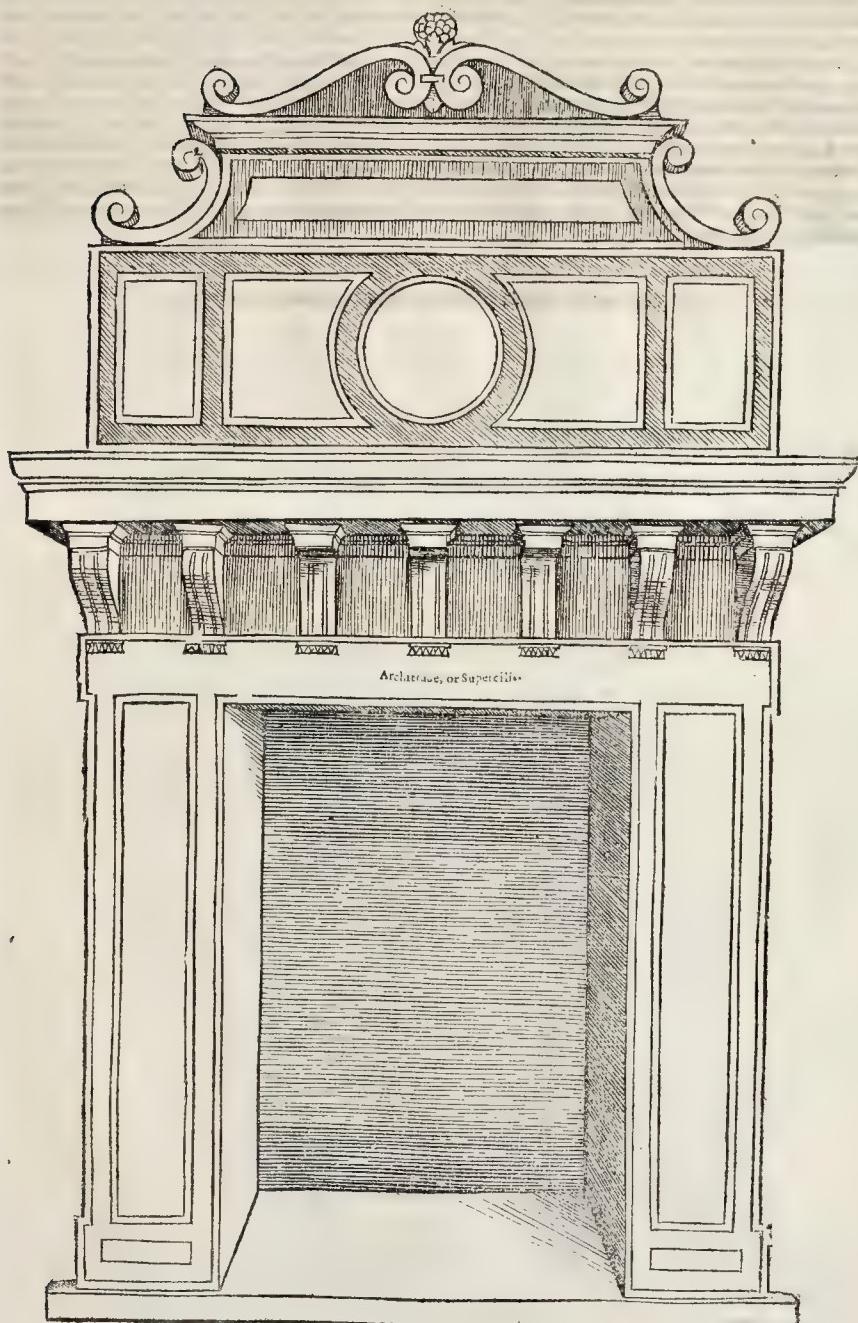
The fourth Booke.

The sixt Chapter. Fol. 31



Of the Dorica

ALthough the woxkeman hath sene so many inventions in this Dorica worke, yet they will not further him for
ornaments of Chimneyes: but I will set two sorts thereof here in Figure, one indifferent whyle, & in the thick-
nesse of the wall, for a small round Chamber or House: the other, for a greater place without the wall, drakone
with Mogdilions: for if a small Chamber shold be cumbered with a Chimney, it is requisite to make it wholy
within the thicknesse of the wall, and the height of the opening being made, according to the situation of the place, shall
be devided into fourte parts and an halfe, and shall be the bredth of the Pilaster, but the Architrave shall contane the
halfe: the Tenuis or List, going round about, shall bee a seuenth part, and all his other Listis of the same bredth: the Tri-
gliphes and Mogdilions, shall be halfe the bredth of the Architrave, but their height you shall take in this manner, that
the Putiles stand aboue the Pilasters, and the Trigliphes deuided betweene both, the Metopes may have
their foursquare of the bredth of the Architrave, but yet the Metopes or spaces betwixt the Mogdilions,
shall not bee foursquare. The Capitals of the Putiles and Trigliphes, shall bee so high as halfe the bredth of the
Trigliphes. The Corona, with the Scimatic and Scima, shall bee as high as the Architrave; and being deuided
in two parts, one part shall be for the Corona; of the other you must make thre parts, one for the Scimatic with the List,
the other shall be for the Scima with his List. The bearing out of the Corona shall be great or little, that the spaces
betwixt the Capitals of the Trigliphes in the ground of the Corona, may be foursquare, so that, if men will stround
about it, they may have their place of sight. The Projecture of the Scima with the Scimatic, shalbe made like that height
which standeth above, at the discretion of the woxkeman. But if the Chimney be very small for a little roome of Cham-
ber, then a man shall make the Pilaster of the seuenth part of the height of the opening.



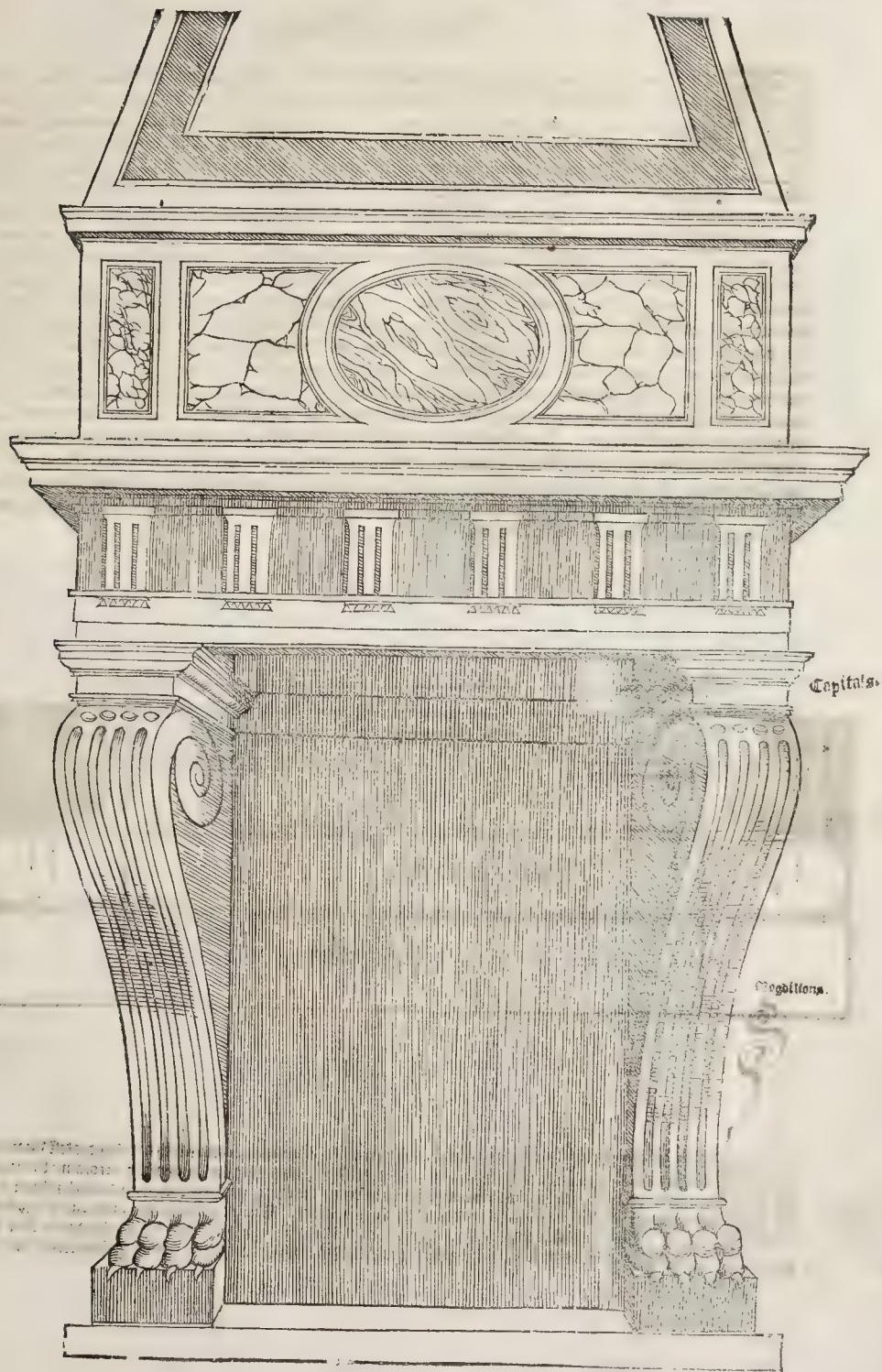
Of the Dorica

This other Chimney without the wall, shall be made thus, when the height and widenesse of the place, according to the situation, is apportioned, the same height, from the ground vp to the Architrave, shall be divided in 4 parts, one part for the Architrave, Frieze, & Cornice, their parts being made according to the rule aforesaid: and whereas they shew greater, that is, because more sa them underneath, the breadth of the Hodiglions shall be the 7. part of their height: the Capitals the halfe of that breadth, and shalbe devided as it is said of the Doricall Capitals: some lesse the bredths of these Hodiglions vnderneath the fourth part, that the foote of them may give out a fourth part, so that the Plinthus under the foote, is as broad as the uppermost part. But if you will make such Hodiglions all of one breadth, I would command it in a great woeke, for that the vndermost drawing to the wall, & going from our sight, lessen themselves: for that the part which receaueth the smoke, is Piramides-wise, which wil not stand well in a great height. You may set it vpon the first Cornice higher or lower, as you will, or according to the situation of the place. This building of Chimneys may be made in great forme: but if you will make them small, then you shall deuide the height from the Pavement to the Architrave in 5. parts, whereof one shall be for the Cornice: the breadth of the Hodiglions shall be the ninth part of that height, the Capitall of halfe the breadth: and thus it will bee more secrete in an indifferent meane forme. This I speake by experiance, for that I haue obserued this greatest measure in small soynes in making of Chimneys, but they proue too great.

The end of the Dorica order: and here followeth the Ionica.

The fourth Booke.

The sixt Chapter. Fol. 33

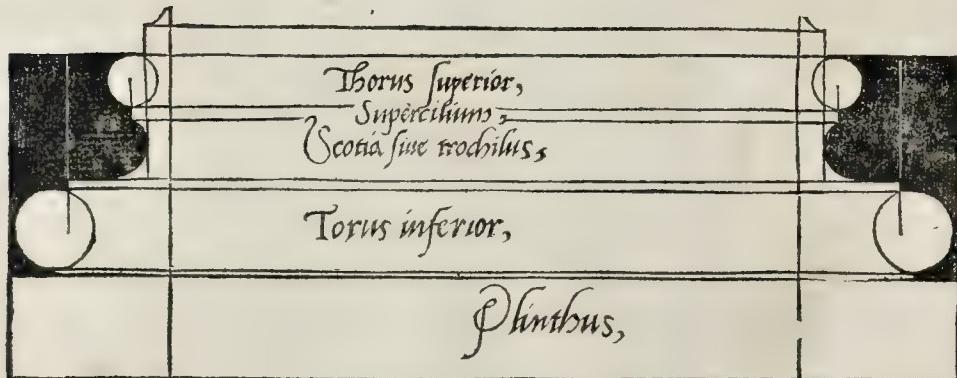


Of the order of Ionica, and the Ornaments thereof.

The seventh Chapter.

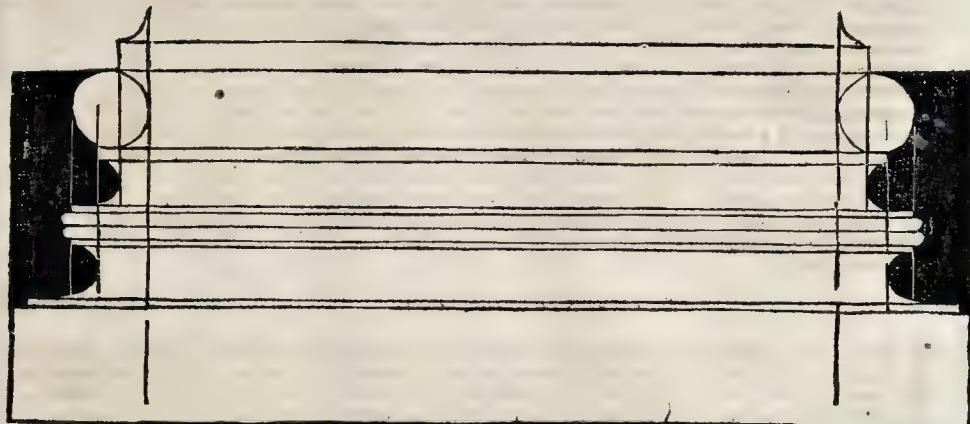


Ieronimus speaketh of Ionica, in his fourth Booke and 1. Chapter: and as I also said, the ancient Pagans tooke this kind of worke from women, and ascribed it to *Diana, Apollo, & Bacchus*, &c. But we that are Christians, hauing a Temple to make of this worke, we will dedicate it to such Saints as are of nature, eyther weake or strong: so likewise, common workes are fit for peaceable people, men, neyther great workemen, nor all too simple in workmanship: and such workemen are fittest for such worke. Now let vs come to the measures: the Ionica Columnne, by a common rule, must be of 8. parts, with Capitall and Base: although that *Vitruvius* sayth, it must be of 8. parts and an halfe; so may men sometimes make it of 9. parts and more, as some indifferent workemen haue affirmed. But this, I say, shalbe made of 8. parts, which must hold his thicknesse below, and so shall their Bases be of halfe the same thickenes, which *Vitruvius* setteth downe diligently, in the 3. Booke, and in the third Chapter of the same Booke, in this maner, that the Base aforesayd, must be of halfe the Columnnes thickenesse, but the Plinthus must be of the third part thereof: which Plinthus taken of, you shal make seuen parts of the rest; whereof three shalbe for the Thorus, and foure shalbee for the two Scoties or Trochiles, with their Astragals and Lists, so that each Trochile must haue his Astragall. The Astragall shall be the eyght part of the Trochile, the Lists halfe the Astragals. Although each Scotie with the Appendances are all of one height, yet the vndermost shalbe greater; for it shall shooe out underneath, to the outermost part of the Plinthus. The Proiecture on eyther side, shall be one eyght part, and one sixt part: so that the Plinthus on eyther side shalbe one fourth part, and one eyght part more then the thickenesse of the Columnnes. Now, for that the Cincte or List is suppressed by the greatness of the Thorus, I am perswaded that it ought to be made the halfe greater then the other. Obserue in all the members and parts with discretion, as should be vised in the Dorica.

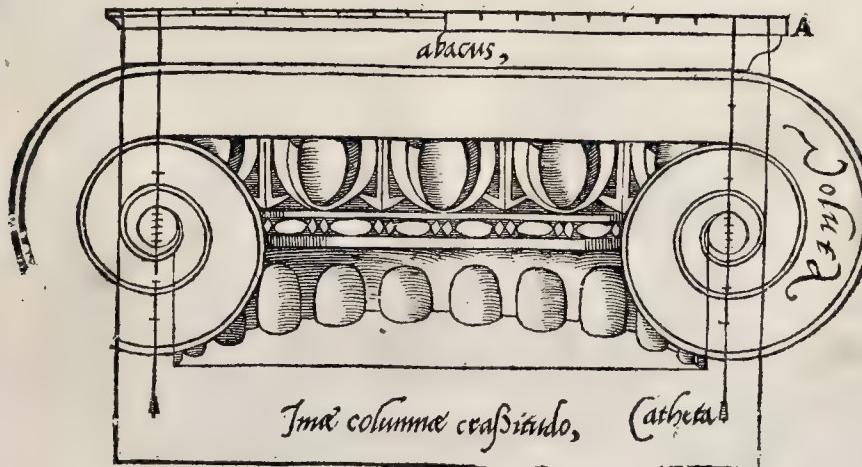


DE R that the Base of the Ionica Pillar, written of by *Vitruvius*, contenteth not the greatest workement, because the Thorus is very great, and the Astragall small, vnder so great a member, according to the judgement of expert workmen, that haue oftentimes disputed the same, with reverence, and much respect of such an Author: I will shewe one here according to my opinion. The Plinthus being made, as I layd before, the rest shalbe divided in thre parts, whereof one part shalbe for the Thorus: the other vnder that Thorus deuide in sixe parts; one of them for an Astragall, the Cincte the halfe thereof. The Cincte or Supercilium vnder the

Thorus, must be as broad as the Astragall. The rest is for the Scote or Trochile: the other three parts that rest shall also be deuided into sixe parts: one for the Astragall, one halfe for the Cinthe, and the undermost also the like: the rest is for the Scote comming at underneath, as is before all saged.



The Ionica Capital shall bee made in this maner: the height shall be the third part of a Columnme, and the former part of the Abacus the brede of a Columnme in thicknes: to it also must be added the 18. part, which in the whole, shall be nineteen parts, but inwards a part and a halfe: at either end the line Catheta must be drawne, which shall containe 9. parts and an halfe, which is the halfe brede of the Capitall: one part and a halfe shall be for the Abacus, which Corneres you must make like the right or left side, for both are ancient: the 8. parts that are hanging under the Abacus, shall be for the Volutes. And for that it would be troublesome in this small Figure, especially to set downe before your eyes the numbers, therfore in the Leaf following, I will shew it better in great, and therewithall the maner how to make the Strickes in the Columnmes, with the Figure of the side of the Volutes, and of the Capitals. But if the Columnbe of 15. foote downwards, then it shall be lessened a fift part above, as it is written of the Thyscan oder: but if it bee of 15. foote upwards, then I referre you to Vitruvius, touching the same, in his third Booke and second Chapter.



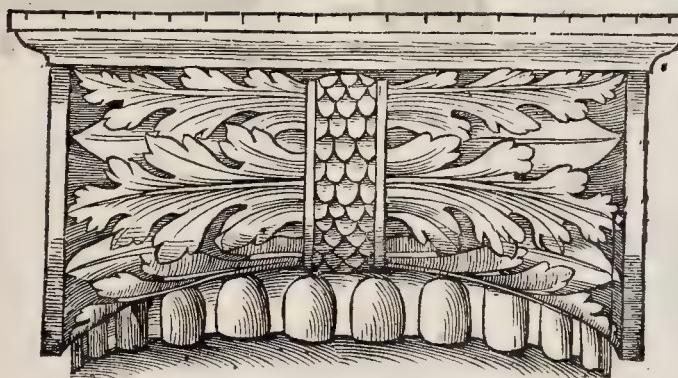
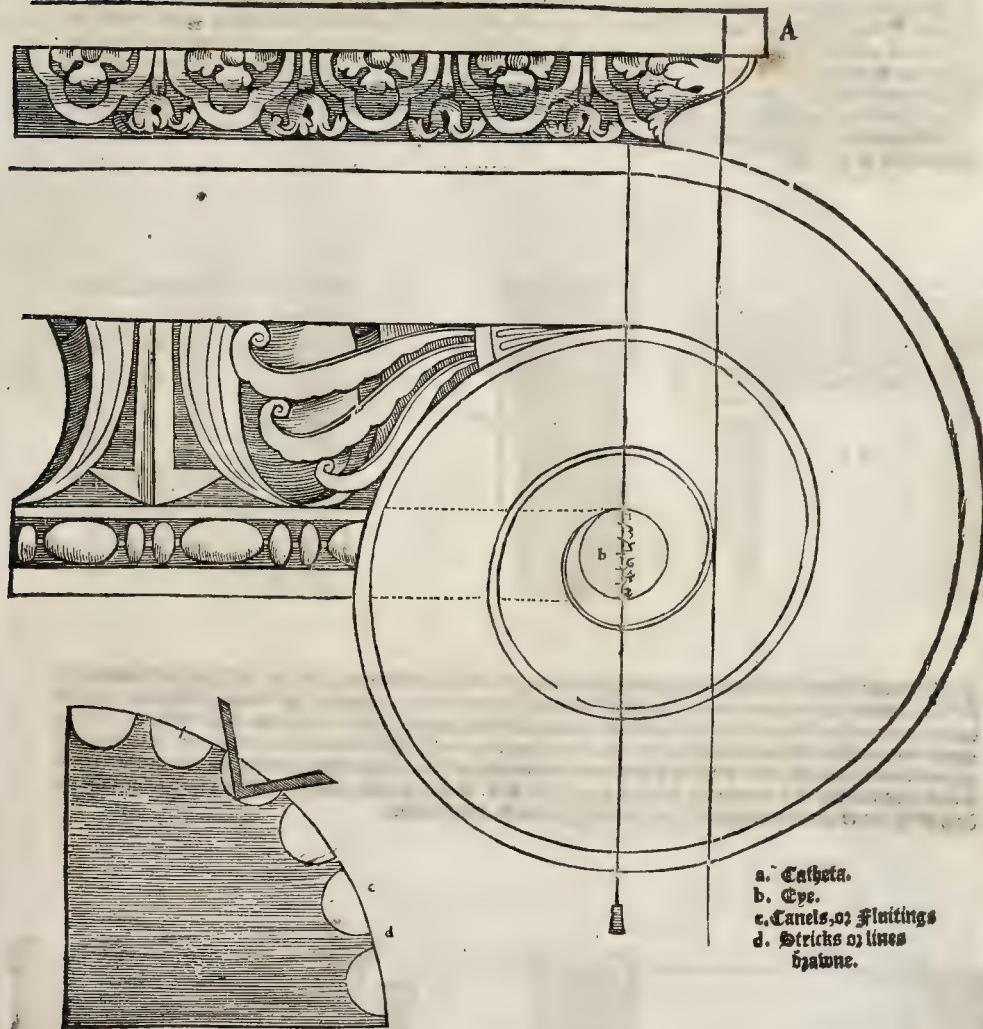
Of the Ionica

WHICHE the Capitall of this Ionica is made, you must make the Volutes, which shall bee made by the line, called Catheta, which we heere call, The right Lead: and when you leane the Abacus underneath seuer parts, then the first part shall be for the eye, and so there yet refelct these parts from the eye downewards; and so in all, they make eyght, as is before sayd: the eye shall be denide in sixe parts, and the numbers set therin, as it is here set downe; then place one foote of the Compasse upon the point 1. and the other foote vnder the Abacus, drawinge netherward, vp to the Catheta, to the eyght part; then letting the same foote of the Compasse stand, bring the other foote of the Compasse to 2. and draw it bywards againe to the Catheta. Then hold the foot of the Compasse there, bringing the other foote to 3. drawing it then downewards againe to the Catheta: keeping that foote there also, bring the other vpon the point 4. then drawing it againe to the Catheta, holding the Compasse there, the foot will come vpon 5. so drawing about, doe likewise to 6. and then it comes to that with the eye; there you may make a roose, if you pleaue. The rest of the particular members you shall easly find with the Compasse. The strickes of the Columnnes, which we call Chanels or hollowings, shall be 24. in number, and one of them shall be 5. parts: whereof 4. shall be for the Cuttes or Chanels, and the 5. for the Lis, by Vitruvius called Stirr: and so from one side of the flat of the Lis to the other, you shall draw a straignt line, the middle whereof shall be the Center of the hollowing out. But if the workeman please sometimes to make a thinne Columnne to shew thicke, then there must bee 28. strickes: the Abacus of this Capitall is as broad on the sides, as before: which sides are proportioned according to that, which is sayd before. Friendly Reader, I haue layd this Volute, according to my simple understanding, because Vitruvius writing is hard to understand, and which is more, promised the same Figure in the last Booke, together, with divers other ornaments, which Booke is not to bee found.

S. Serlii vpon the speach aforesayd.

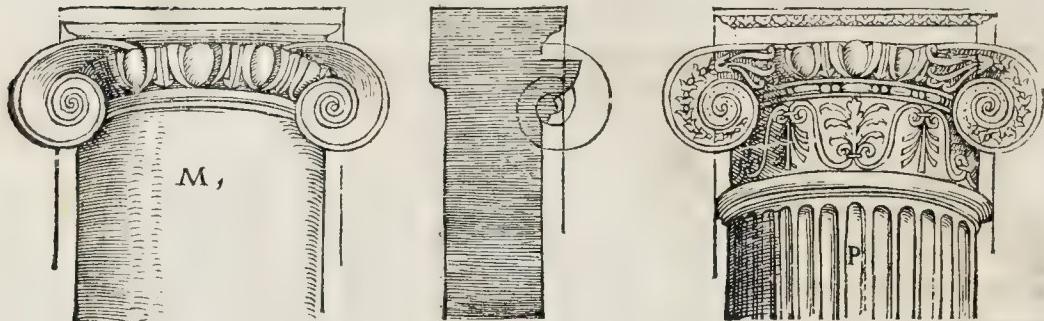
Loving Reader, there are many things which cannot fully, from point to point, bee shewed in Figure, vntill the workeman must helpe himselfe by practise, like as the Circles or bands of these Volutes: which (if the Capitall bee very great) will stand well: if the breadth containeth the fourth part of the eye, and if the Capitall bee of indifferent greatness, then it must be made of a third part of the eye: but if the Capitall be small, then it must bee the halfe of the eye, alwaies at the workemans discretion: so I haue saue it so in Antiquities, although they differ. The thicknesse being marke above, vnder the Abacus, then you must place the Compasse a little below the figure 1. from above the Catheta downewards; then agayne, you must place the Compasse a little above the figure 2. drawing your line from beneath vpwards to the Catheta.

Now, whereas I haue sayd, that the last Booke promised by Vitruvius, is not found, by meanes whereof, divers opinions are spred abroad touching the same, some affirming, that in Vitruvius time, there were many unskillfull workemen (as there are now also) hauing better fortune, then god understanding: (others) that presumption, sicker to unskillfulness, bareth such sway among common workemen, that understand not themselves, it is thought, that Vitruvius refuted, or at least, wouldest not publish it, in regard of the unthankfulness of such as neglect god learning. Some also affirme, that it was too hard a matter for him to place them in figures; which I can hardly judge to bee the mind of such an Author. But whereas some affirme, that this last Booke was so pleasing and acceptable, in regard of the figures there at large set out, and he being once carefull in looking vnto it, was robbed thereof, aming other riches and treasures, by unskillfull persons: this I believe best, is as waile, which is enemy to all god Artes, which yet, at this day, is especially to be lamented, for that men by the figures, might haue made diversities of worke in the right manner.

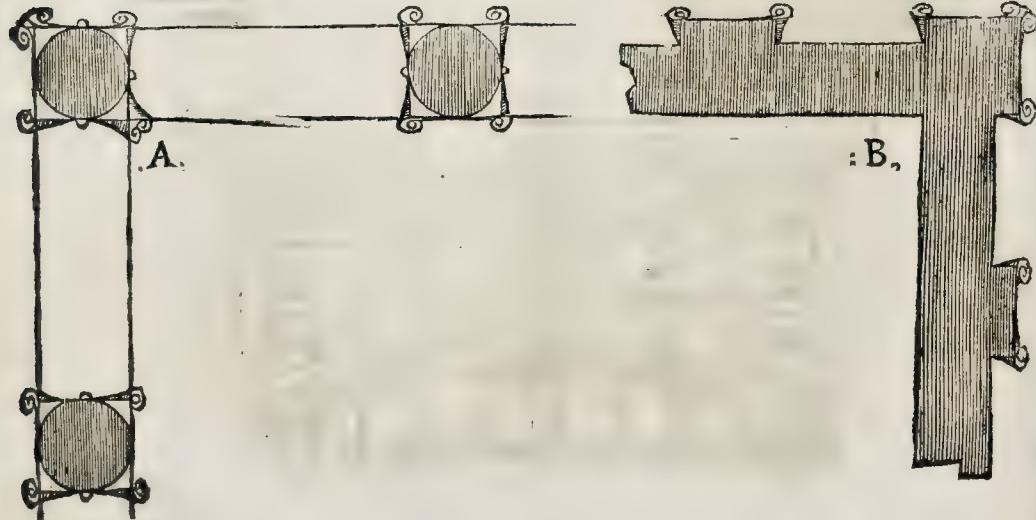


Of the Ionica.

IHane declared hereafter, according to Vitruvius writing, how to make Ionica worke, as farre as my learning shall serue. Now, I will shew how some Antiquities in Rome, of that worke, are made, yet standing. The Capitall M. standeth yet in the Theater of Marcellus, whereof I will set downe some general measures: the toppehead of this Abacus is like unto the Columnne below. The Volutes gaine out a sixt part of the Abacus, and so farre out as the halfe of the Abacus: the height of the Capitall is a third part of the Columnne below; but for that some workmen thought that Capitall to be but barely set forth, they haue added the Frize which you see in the Capitall, vnto it, making the height of the Capitall of 2. third parts, of the Columnnes thickenesse below, which Capital is at this day to bee seene in Rome, with others of the like.



And for that it may sometimes happen to the workeman, to make a foursesquare shutting with Ionica Capitals, so that some workmen haue erred in placing of the Volutes; to helpe or ease you of that error, it shalbe nedfull to make the corner Capitals, as you see them in this ground: of such Capitals, there was the like found in Rome, which caused many to study, where it was made, in such maner, for it was called, The confuted Capital: but at last, after long disputation, it was concluded, that it had stood in an open corner, shutting by the order of the Columnnes marked A. But if the workeman haue flat Columnnes to place against the wall, in this Corner, that the Volutes may come alike on both sides, the workeman may place them, as in the ground B. is let downe.



The Epitilium or Architrave is made thus: If the Column be of 12. to 15. fote high, the Architrave shalbe the halfe of the Column beneath: if it be of 15. to 20. fote high, then it shalbe deuided in 13. parts: one shalbe the height of the Architrave; and from 20. to 25. fote, the Column shall be deuided in 12. parts and a halfe: one part shalbe given to the Architrave: If the Column be of 25. to 30. fote high, then the Epitilium shall be the twelveth part of that height: If the Column be higher, you must increase the Architrave more: for the further it goeth from a mans sight, so much more it loseth of the greatness. The Architrave being made of his true light, and deuided in 7. one shalbe the Cimatic: the Projecuture thereof, also so great. That which is over, is deuided in 12. thre shalbe given to the first Facies, four to the second, and five to the third. The thicknesse of the Architrave under, shalbe like the Column above, in the thinnest part: but the thicknesse of the Architrave above, shalbe like the thicknesse of the Column below. The Zophorus or Frize shall haue the measure according to the length of the worke: but if there be somewhat to cut or graue in it, then it must be made a fourth part higher then the Architrave: but if it be made plaine, without cutting or grauing, then it must be a fourth part lesse. The Cimatic must be set vpon the Frize, whiche must be the seventh part of the same Frize: and the projecture also as much. Above the Cimatic must the Denticulus be placed, in height, like the middlemost Facie: and the Projecture like the height. The breadth of their teeth must be double in height. The intercutting or hollowing betweene the teeth, shalbe a third part lesse. The Cimatic is the first part of the Dentile. The Corona, with the Cimatic thereof, is the greatness of the middlemost Facie. The Projecture of the Corona, with the Denticules, is as much as the height of the Frize, with the Cimatic. The Scima is an eight part higher then the Corona. The rule of list thereof shall be a sixt part, and the Projecture like the height. Also our Author affirmyeth, that all Ephoves or corners will stand well, when their Projecture is like the height.

Scima

Cimatum,

Denticulus,

Cimatum,

Zophorus,

Cimatum,

iii. fascia

Episti.

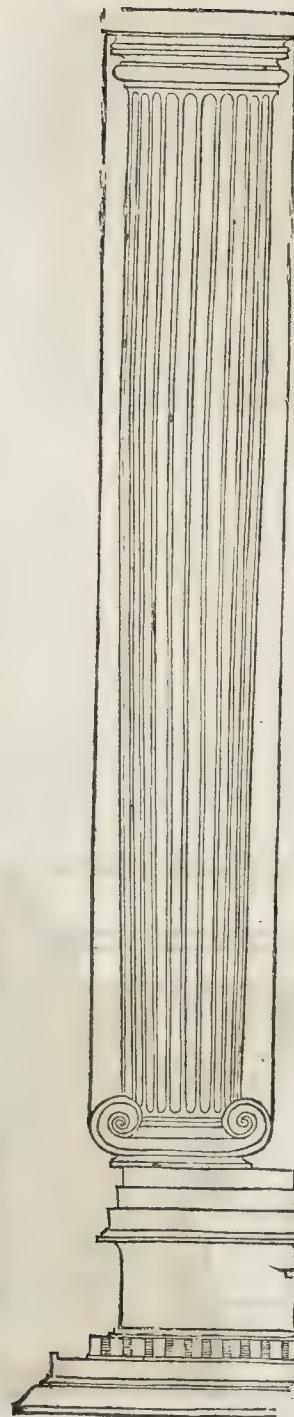
ii. fascia

li.

i. fascia

m.

Of the Ionica



For that the works of Rome differ from the writing of Vitruvius, I will frame another Columnne, whereof the Architrane, Frise and Cornice, shall be the fourth part of the height of the Columnne: which 4. part denided in 10. parts, thre shall be for the Architrane, denided after the rule aforesayd: 3. for the Frise, and 4. for the Cornices: which 4. shall bee deuided in 6. whereof one shall be giuen to the Denticules, one to the Cimature whiche upholdeth the Nuttles, and two to the Nuttles and the Corona; the rest to the Scima. The Prolecture of all, shall be at least as much as the height: upon such a Cornice was found written, A Sancte Sabina, at Rome, in a building of the order of Ionica.

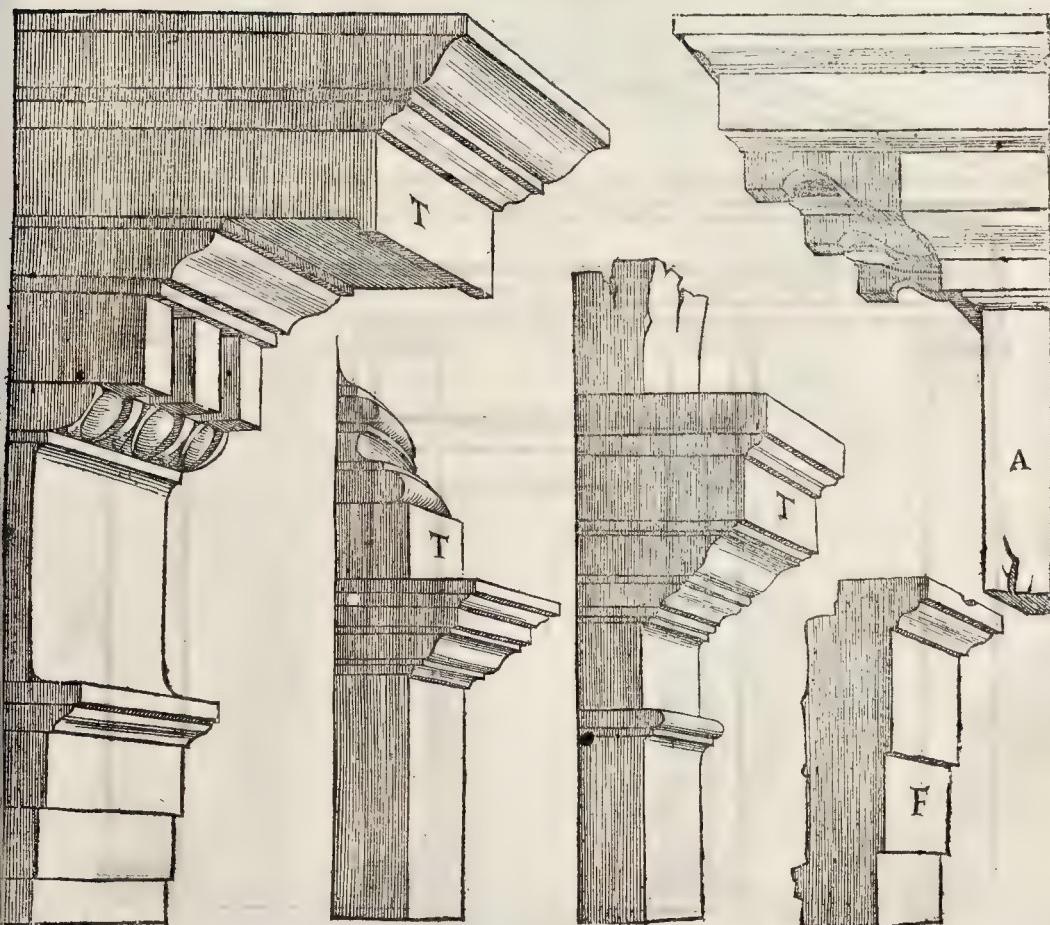
If sometimes it be necessary to rase vp Columnnes, being not compellid or pinched by any thing thereabout, then the proportion of y Pedestall shall be thus; it shall be as broad before as the Plinthus of the Columnne: but the height of the flat of the Pedestall shallbe a foursquare, and a fourth part: which denided in four parts, one shall be for the Hale, and one for the Cornice, which in all is eyght parts: so shall the Pedestall be of eyght parts like the Columnne. This must alwayes be understand in common, that it is left at the discretion of the workeman,



The fourth Booke.

The leuenth Chapter. Fol. 37

B
y reason of the great difference, which I finde in things of Rome, from those which Vitruvius writeth of; therefore I haue here shewed some of them, that are best knowne at this day, extant in Rome to be seene in worke. The Cornice, Frise, and Architrave marked T. is in the Theater of Marcellus, in the Ionica oder, above the Dorica; the Pilaster with the Base thereupon, also marked T. is in the same oder, under the Ionica Column. The Cornice with the Hntiles marked A. was found at S. Adrians, and S. Laurence, in Rome. That Architrave marked F. was found in Nei Friule; which Architrave, for that it had thre Facies without Astragals, I judge to be Jentia. Here is nothing said of the measures herof, for I haue diligently reduced them from the great into the small: which meaures are easie to be found with the Compasse.

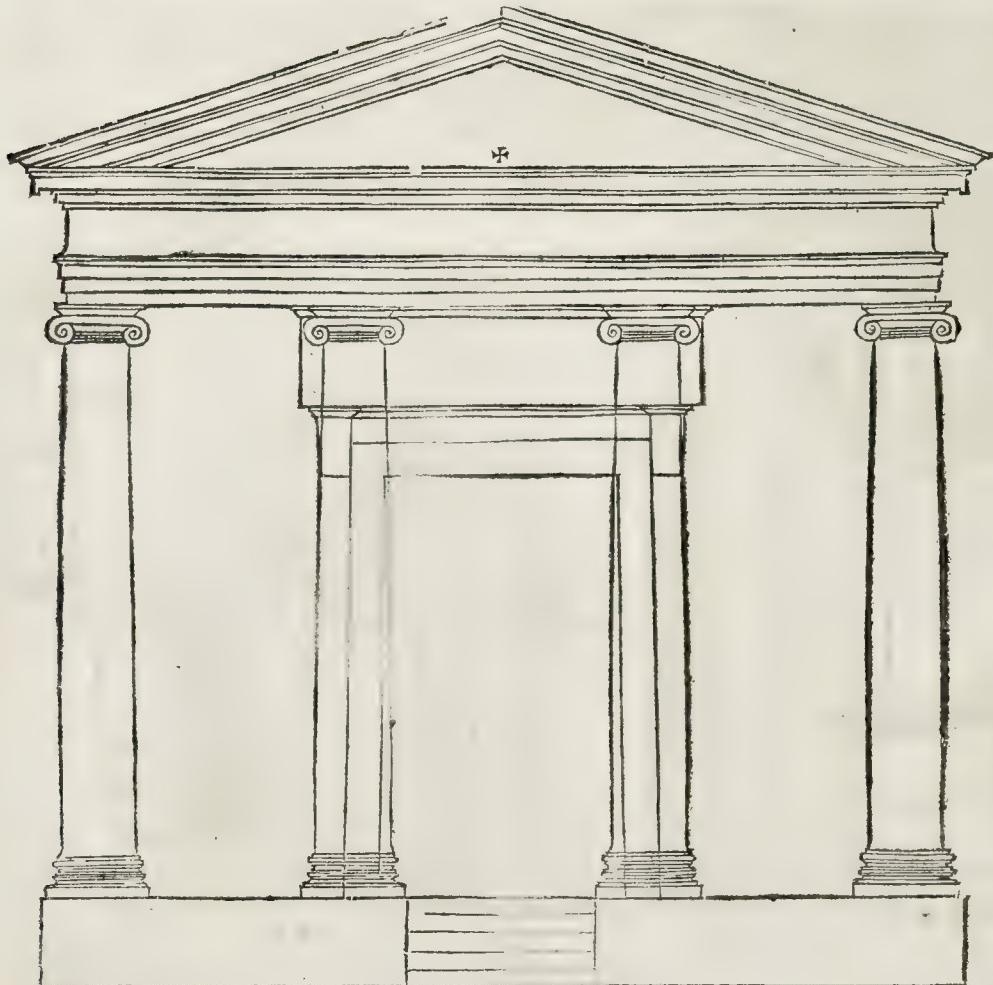


Of the Ionica

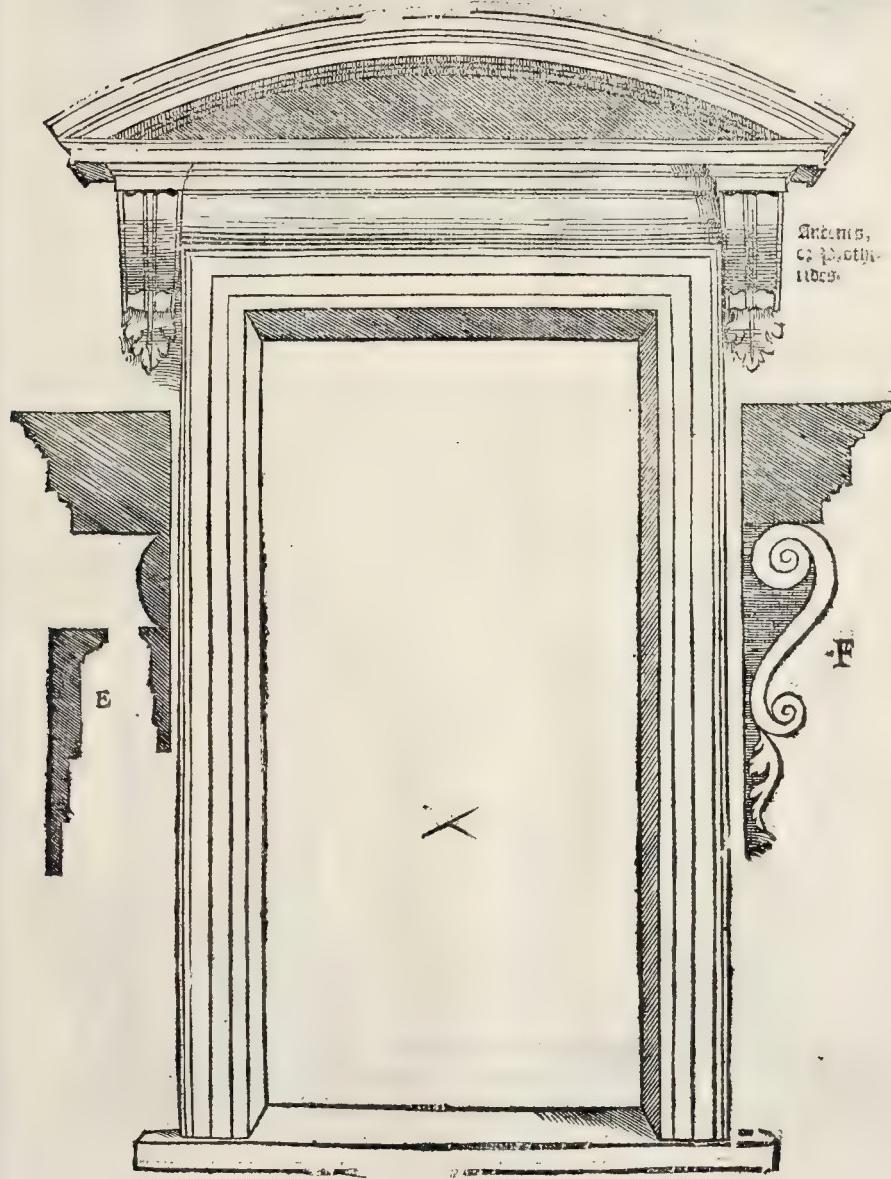
Although that the Thironatum Ionicum, that is, the doore by Vitruvius described, in my opinion, not proportioned to answer the building (as it ought to do:) therefore I will speake therof, according to my knowledge: I say then, that Verriuus writing is not right touching the height of the light of the Thironatum Doore, viz. from the Pavement to the Lacunar, where were 3. parts and an halfe made, and two parts thereof were for the height of the light, whereby the Cozona was very high, as also of the Dorica. But there followeth yet another error, viz. making the Gate or doore 5. parts high, letting thys parts thereof below, as Verriuus saith, also lessened in the upper part, like the Dorica: then I finde, that the wideness thereof commeth to be broader then the inter-Columme in the middle, making a Temple of 4. Columns, with the measure which Vitruvius hath set downe in his 3. Booke, as I have set it downe here in figure, that workemen may see the correspondence of this Gate or Doore, with the Temple thereof; which, in my opinion, is not just, for this caute, for if the doore of the Dorica, which over of Columns is lower then that of Ionica, hath the height of 2. fourresquares, and a little more, I say, the Ionica doores, whose Columnes are higher, ought to be higher also for light, then the Dorica. But it is not so much, according to Vitruvius Booke, which saith, 5. parts in height, and 3. parts in breadt: but let all this be spoken with reverence of so great an Author. Pererthelesse, taking the parts in Vitruvius Booke, which may be to some purpose, I will make another Figure thereof, without lessening it above: but he that for his pleasure will lessen it above, obserue the Dorica order.

The Translactor.

What Vitruvius saith, touching the height of the light of the Doore or Gate of this Dorica building, there is sufficiently spoken: but touching the wideness of this Gate or Doore, where he saith, that the height or opennes thereof should be divided into two parts and a halfe, and the wideness thereof, to have one part and a halfe: It may be (as it is in other places) that the place is satisfied; and it may also be, that it is a quarter too much: for if it be made of 10. in height, and 5. in breadt, the light then being of 2. fourresquares, would bee reasonable, so the Intercolumnies were as wide as from the Dorica: for it is of four Diameters, and this but of thre Columnes wide, and the Antipagmenum would not be darkened; so that leauing out but a quarter, this building would thereby be made perfect.



I say, that the light of this doore ought at least to be of 2. four square high, the Antipagmentū or Pilaster shalbe the 12. part of that height, made in such manner as is said of the Epistilium Youram, & thereto the Astragals shalbe added, as it is shewed in the Figure E. If a wozkeman will cut any thing in the Frese above the Superclium, then it must be a 4. part higher then the Superclium: but if you leauie it plaine, it must be a fourth part lesse. The Corona, with the other members, shall be as high as the Superclium, deuided as you see it in the Figure F. The Ancones or Prothrides, shall be broad above, like the Pilaster, but in the nether part, like the height of the hanging light, shalbe lesse: a fourth part, from the which the leanes hang, as you see in the Figure F. That part of the Circle, in stead of the Fastigium, shal haue his height made in this maner; with a Compasse you must reach the two corners of the Scina in the uppermost part, and one foot of the Compasse sinking to the point of the crose, with the other foot, the part of the Circle being drawne, shalbe the height, which will be the thiro part of a Circle: which maner of making or not making of a Fastigium, shalbe alwayes referred to the pleasure of the wozkeman; it may also serue for windowes.

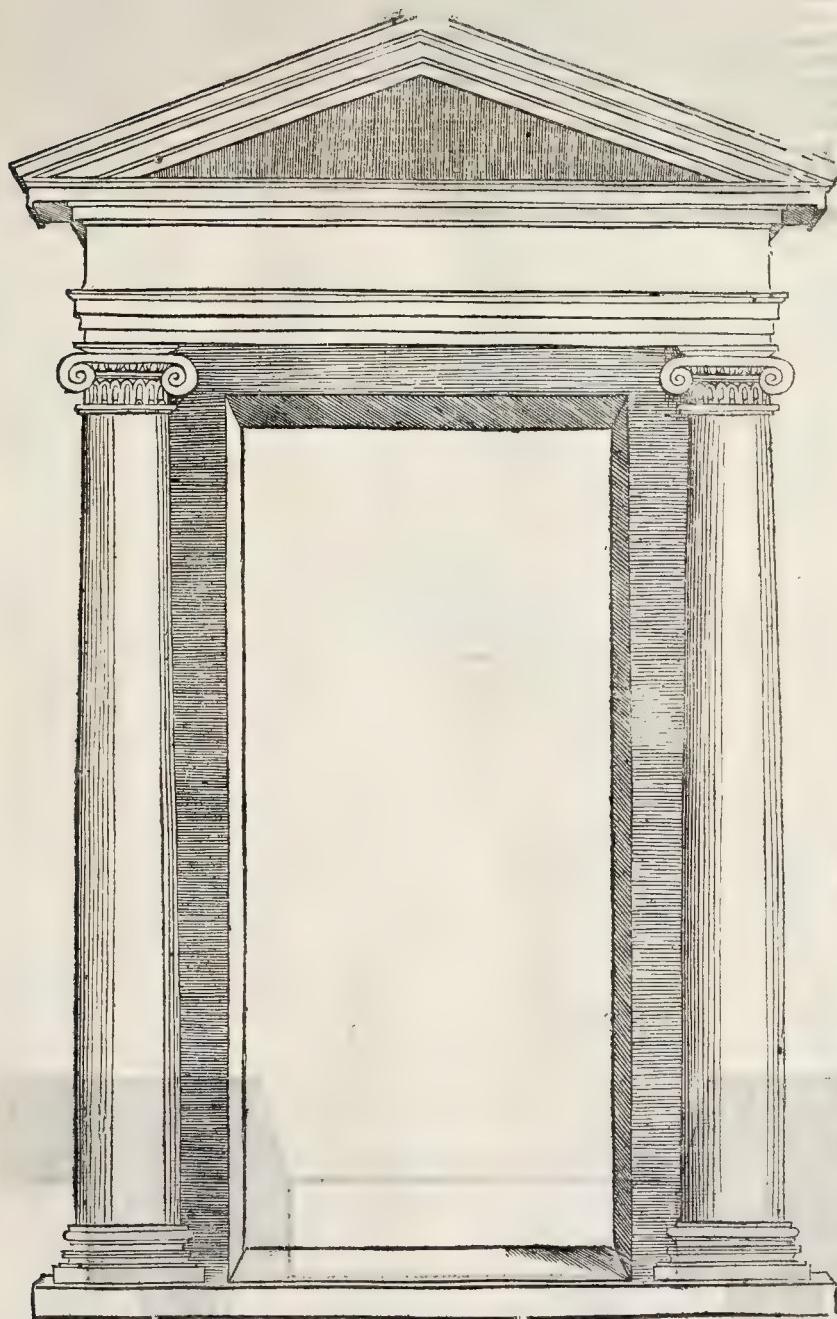


Of the Ionica

The light of the Gate following, is more then of double proportion, viz. of two foursquares and a quarter : the flat
of the Pilasters shall be the 8. part of the breadth of the light, and the Columnes shall be twice as thicke; the same
Columne shall be lessened about a sixt part: the height shall be of 9. parts, with Bases and Capitals, according to
the measure aforesaid. And although these Columnes hold a part more then the rule aforesaid, yet it is not there-
fore true, for that the 2. third parts stand only without the wall, bearing no other weight then the Frontispicium:
further, if by any accident those Columnes shold erred 9. parts, yet were it not to be blamed: for they are only set for
an ornament, being made fast in the wall. The height of the Architrave shall be like the Supericies over the doore: the
Frise shall be cut, and shall be made higher, as is before: if it be not cut, you may lessen it so much lower: the Cornice
shall be higher, like the Epistilium or Architrave: With the other parts you must handle, as it is said in the beginning
of this order. The Frontispiecie shall bee referred to the will of the woorke man, either to make it higher or lower, by
any of the aforesaid rules. By this intention, woorke man may helpe himselfe in many things, making the light high
or low, as need shall require; as sometimes of a foursquare, or of two third parts: but if the woorke man bee not
otherwise compelle, I shold best command the double proportion, that is, of two foursquares.

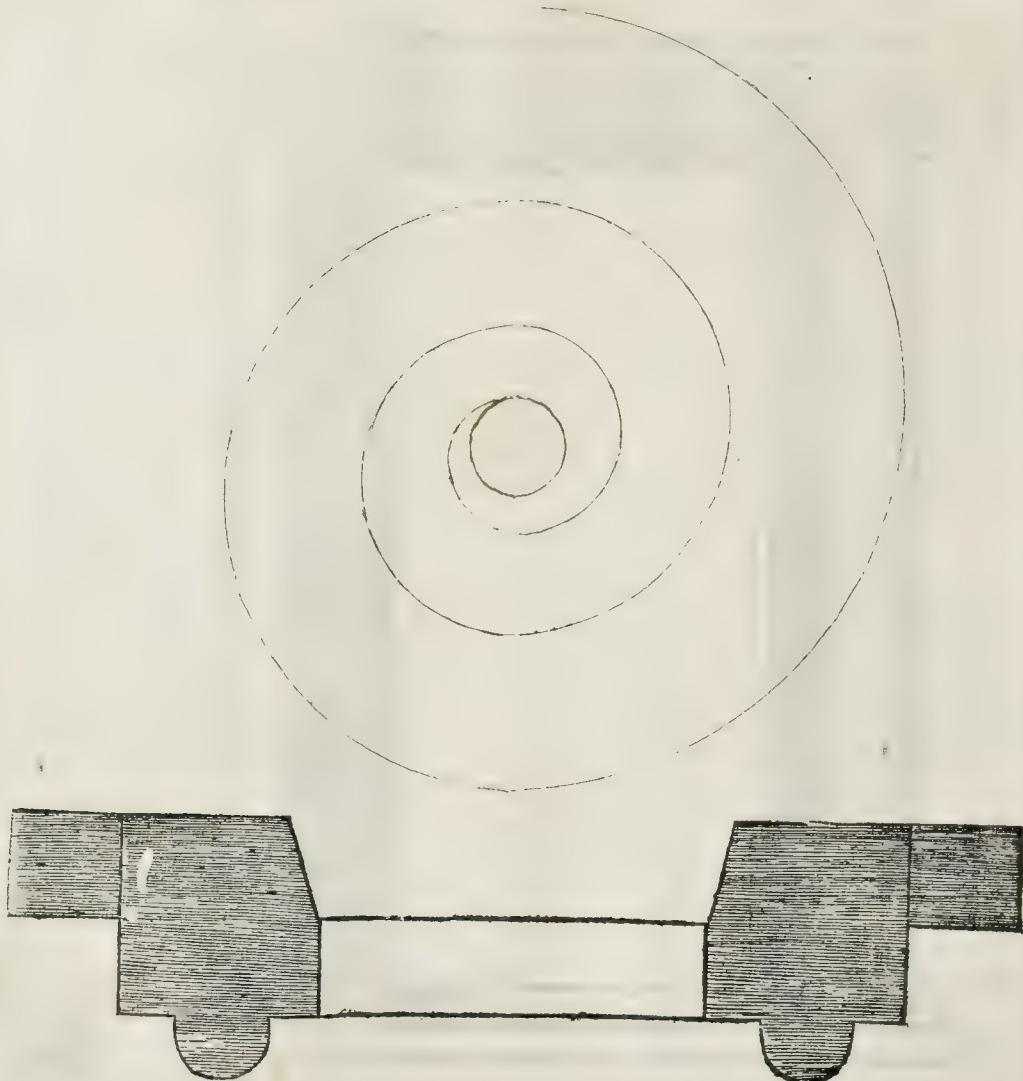
The fourth Booke.

The seventh Chapter. Fol. 39



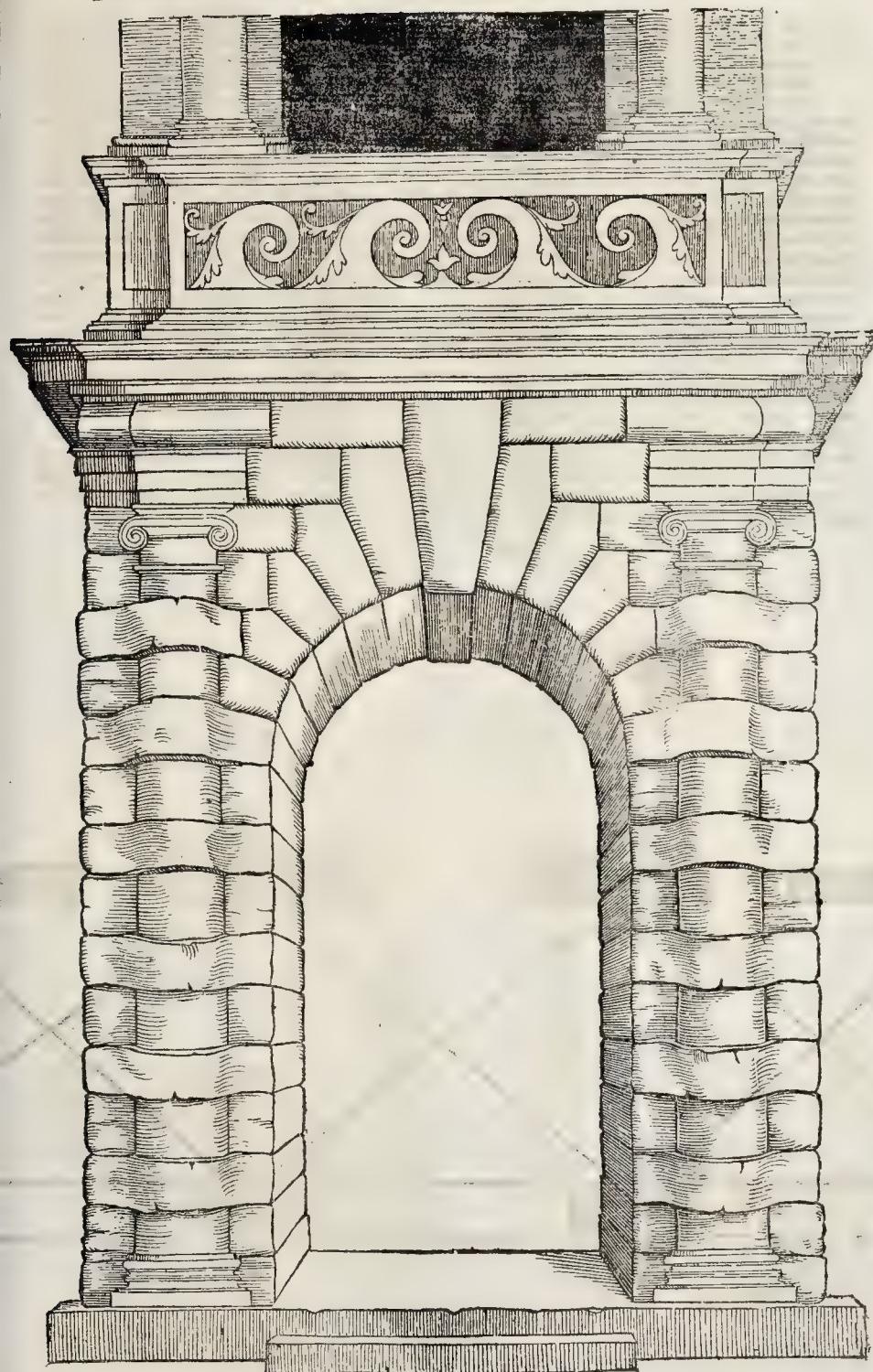
Of the Ionica

ALTHOUGH I have set this rusticall Gate in the order of Thuscan, and not onely in many places applied it to the Thuscana, but also mixed it with the Dorica, yet I have placed it here with the Ionica: although it is not therefore to be set in all buildings that are made after the Dorica, nevertheless, to god intent and purpose, as without in the country, In such a case also, it is not to bee discommended in a Cittie or Towne, for a Merchants or Lawyers house; which places it is tolerable. But in what place soever a man will make it, in a manner of bearing over, then the proportion of this worke shall be thus: the light up to the Arch shalbe two foursquares, and the Pilaster the 8. part of the breadth of the light: the Column shall hold the fourth part thereof, but the height halbe 9. parts with Bases and Capitals. The Arch of the halfe shalbe devide in 13. parts and a quarter, because the middlemost stone shall hold a quarter more then the rest. The Architrave, Frise and Cornice are together the fifth part of the Columnes: of which three pieces, the Workeman shall make 11. parts: 4. for the Architrave, 3. for the Frise, and 4. for the Cornice. The height of the Podium halbe the breadth of the light. The Cornice and the Base, may be taken out of the aforesaid Scolabato: but the other Base, Capital, Architrave, and Cornice, shalbe made as it is say in the beginning. The Arch-Stones and the other that bind the Columnes, you may see in the Figure.



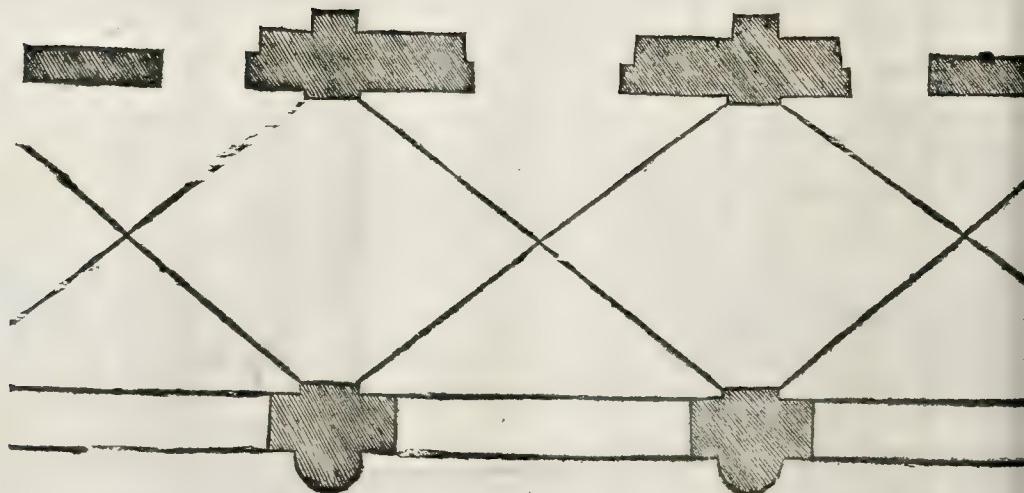
The fourth Booke.

The seuenth Chapter. Fol. 40



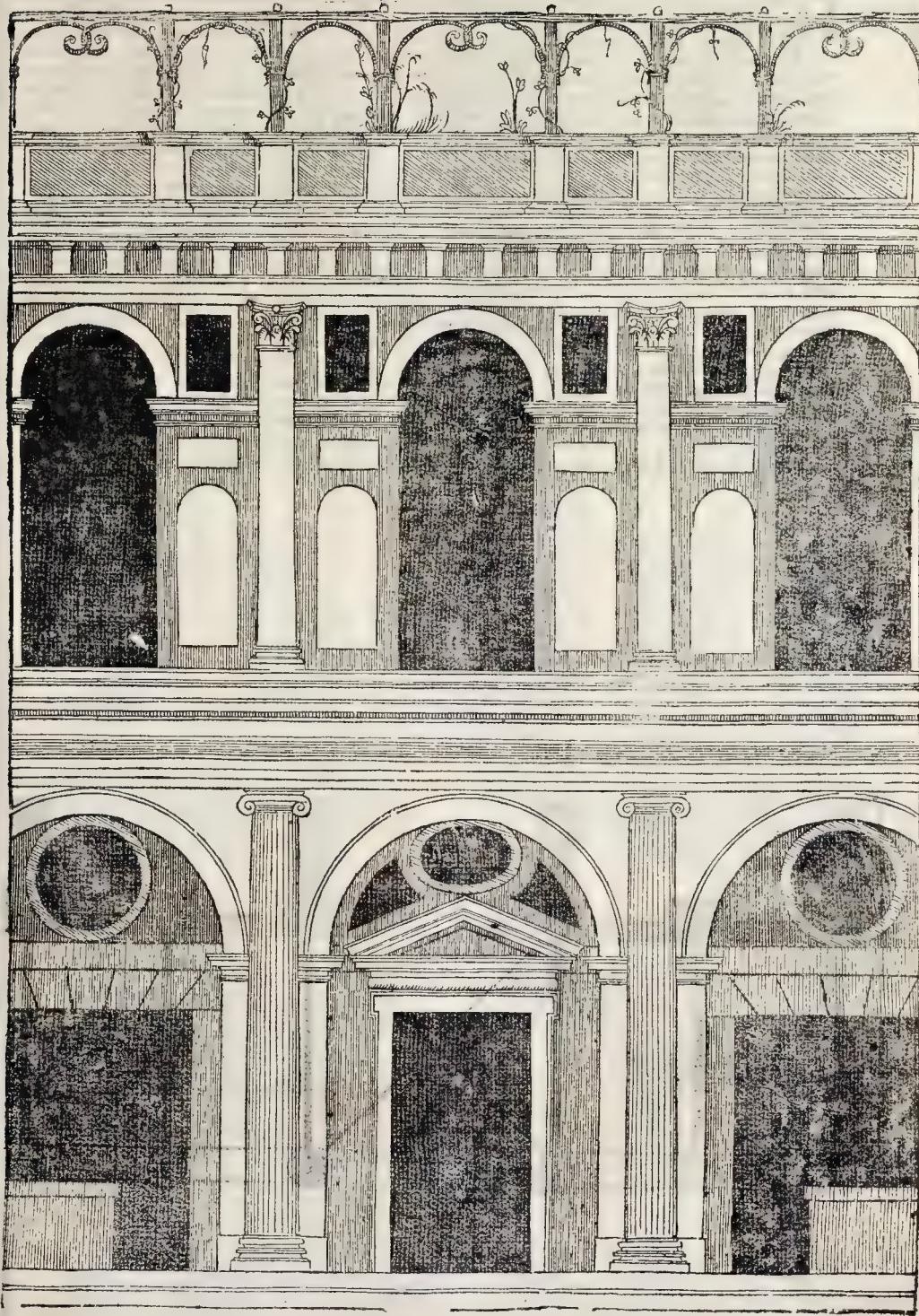
Of the Ionica

ALthough the height of this Arch is not of double proportion, as the most part of those which I have shewed, yet it is not false, but is made by god discretion, for that it may sometime fall out, that in the compaction of 2 Faries, upon occasion of any necessary height, and to make the Arches one qual, which should be so to place the principall gate in the middle, which in such case should not attayne to such height: but if we be not constrained by any necessity, I more commone the double height, then any other proportion. The widenesse then betweene one Pilaster and the other halbe 3. parts, and the height 5. but afterwards the wideness being denide in 5, then the whole Pillars which stand before the 2. Pilasters, haue 2. parts, and the thicknesse of the Columnnes halbe of one part: the Pilasters shall each of them haue of halfe a Columnne in thicknesse: likewise the Arch, and the Impost whiche upholdeth the Arch, are of the same height made, as it is shewed in the Theater of Marcellus marked T. The Columnnes halbe 9. parts high, with Bases and Capitals, made according to the rule, in the beginning of this Chapter set downe: the doore in the middle halbe halfe the wideness betweene the Pilasters: the height halbe found in this maner: The Pilaster being made of the sixt part of the height, the Corinice like the eyes of the Impost, placed aboue it, and the Scima vpon that, making afterward the Frese the fourth part lesse then the Antipagmentum, then the height will finde it selfe, whiche will be littell lesse then two fourquarees. The Frontispice halbe made according to rule set downe in the Dozica: the Architrave, Frese and Cornice halbe made in height, of the fourth part of the heights of the Columnnes, by the rule aforesaid. The Story above halbe lower by one fourth part: so shall the Architrave, Frese and Cornice bee of the fift part of that height, whiche shalbe the fourth part of the height of the Columnnes: but touching the devison of the particular members, you shall finde them in full measure in the Order of Composita. The windowes being made with Arches, shalbe in breadth like the doore: likewise the Pilasters and the Arches, but their height shalbe two fourquarees and a halfe, whiche is to give more light in the chambers. The Columnnes shalbe flat, and one fourth part shorter then the lower. The breadth of the Pictures betwene the Columnnes and the windowes, is one Columnne and a halfe, the height of four Columnnes thicknesse. Thus of any parts or members that bee restling, you shall finde meanes to make them by the prescription of the aforesaid rules of that order: for of this Corinthia, you shall finde the measure in the beginning of that order. Aboue this story, he that will, may make a walking place, well defended from water: and that the height of this Podium were of reasonable height to leane vpon, or to rest vpon with a mans armes, these Faries would bee a great beautifying to the building, and muchease to the inhabitants.



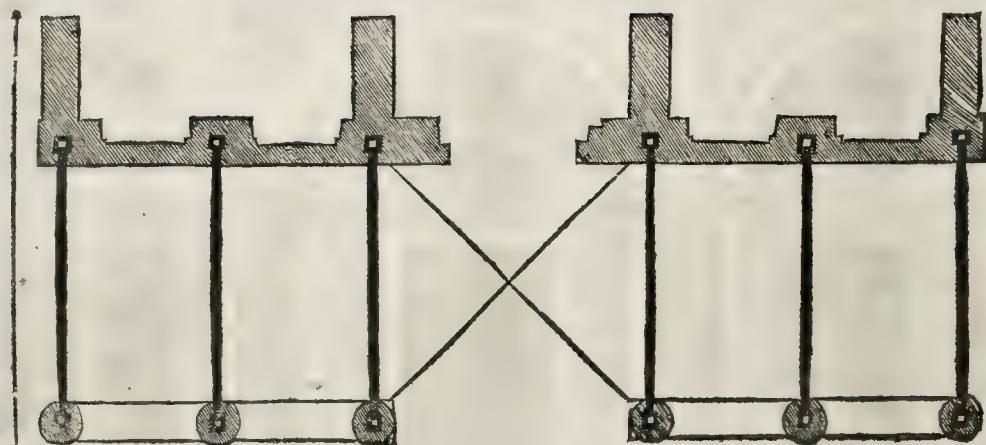
The fourth Booke;

The seuenth Chapter. Fol 41



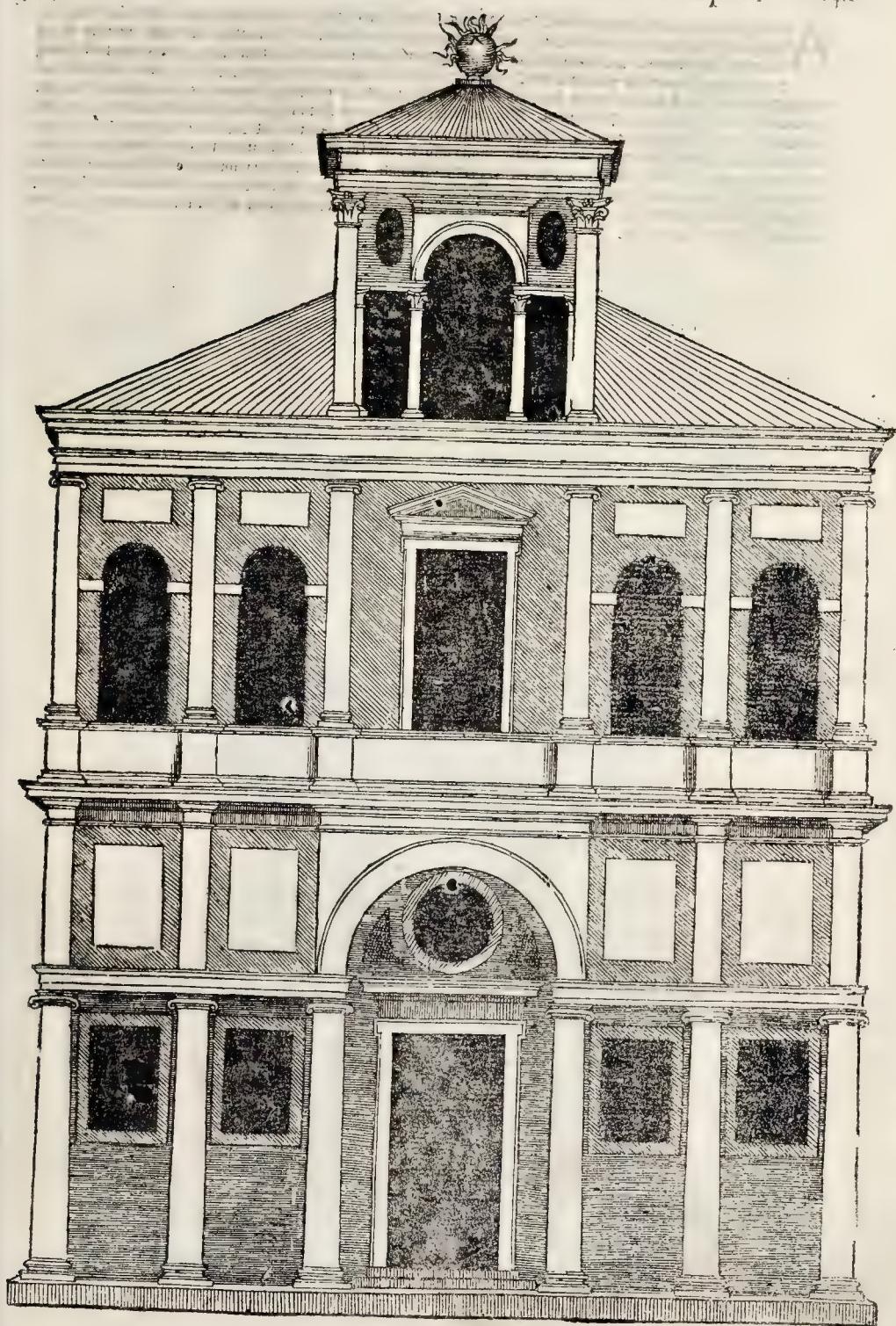
Of the Ionica

Sometime, as is layd, a workeman shall find a great number of Columnnes, but so low, that they will not reach high enough for his wroke, if he cannot helpe himselfe therewith, and apply such members, to serue the building which he hath in hand: therefore if the height of the Gallerie riseth higher then the Columnnes, then in the middle of the Facie you may make an Arch, being vpholden by the Architrave, whiche shalbe aboue the Columnnes, which Architrave shall bee the Impost or vpholding of a round rose. But where the Arch shall be, there shall be a Croicerie, as the workeman may see in this ground: and so strong theing thereof, let there be Iron or metall barres layd ouer, as it is taught in the Dozica Order. But the deuining of this Facie shalbe such, that the middlemost Intercolumnie shalbe of 6. Columnnes thicknesse: and the height of the Columnne, with Bases and Capitals shalbe of 8. parts: the Architrave holdeth as much as the Columnne is in thicknesse aboue: likewise the Arch: aboue the which the workeman shall make a Cornice, which height shall hold a fourth part more then the Architrave, without the Thorus vnder, with the List: which Cornice shall also serue for a Capital upon the Pillars, aboue the Columnnes, and halbe of the same breadth that the Columnne is aboue. The Intercolumnies on the sides shalbe of 3. Columnnes in thicknesse: the height of the doze shalbe so, that the Architrave vnder the Arch shall serue for the Cornice aboue the doze, changing partly her members, as it is figured. Under the Cornice there shalbe a Frese set, whiche shalbe a fourth part less then the Architrave, the Supericies with the Plaster of the same height. But as much as shalbe vnder the Supericies, to the stayes, of that halfe, the breadth of the light halfe made; and so the light halfe of two fourtisquare. The windowes shall stand as the eyes of the doze stand, and their widenesse shalbe of two Columnnes thicknesse, but the height shalbe taken in Diagonall maner: the second Order or Stay shalbe a fourth part less then the first; the Podium being taken of a reasonable height, that which resteth shalbe deuided in 5. parts, four whereof shall be for the height of the Columnnes, the other for the Architrave, Frese and Cornice, obseruing the givene measures of such a Stay. The breadth of the window in the middle, is with the Antipagmentum as wide as the light of the doze, but the light shalbe double in height: in the Ornamenti aboue, workemen may follow and obserue the rule set downe. The windowes on the sides shall be like thole that stand belaw, and their height like the greater: the rasing vp in the middle above the second Stay, shall also be a fourth part less then the other, and every part thereof lessened accordingly: for the light thereof, the order of the lowest Stay is obserued: but the making of this third Stay, or the not making thereof, is at the pleasure of the workman.



The fourth Booke.

The seuenth Chapter. Fol. 42

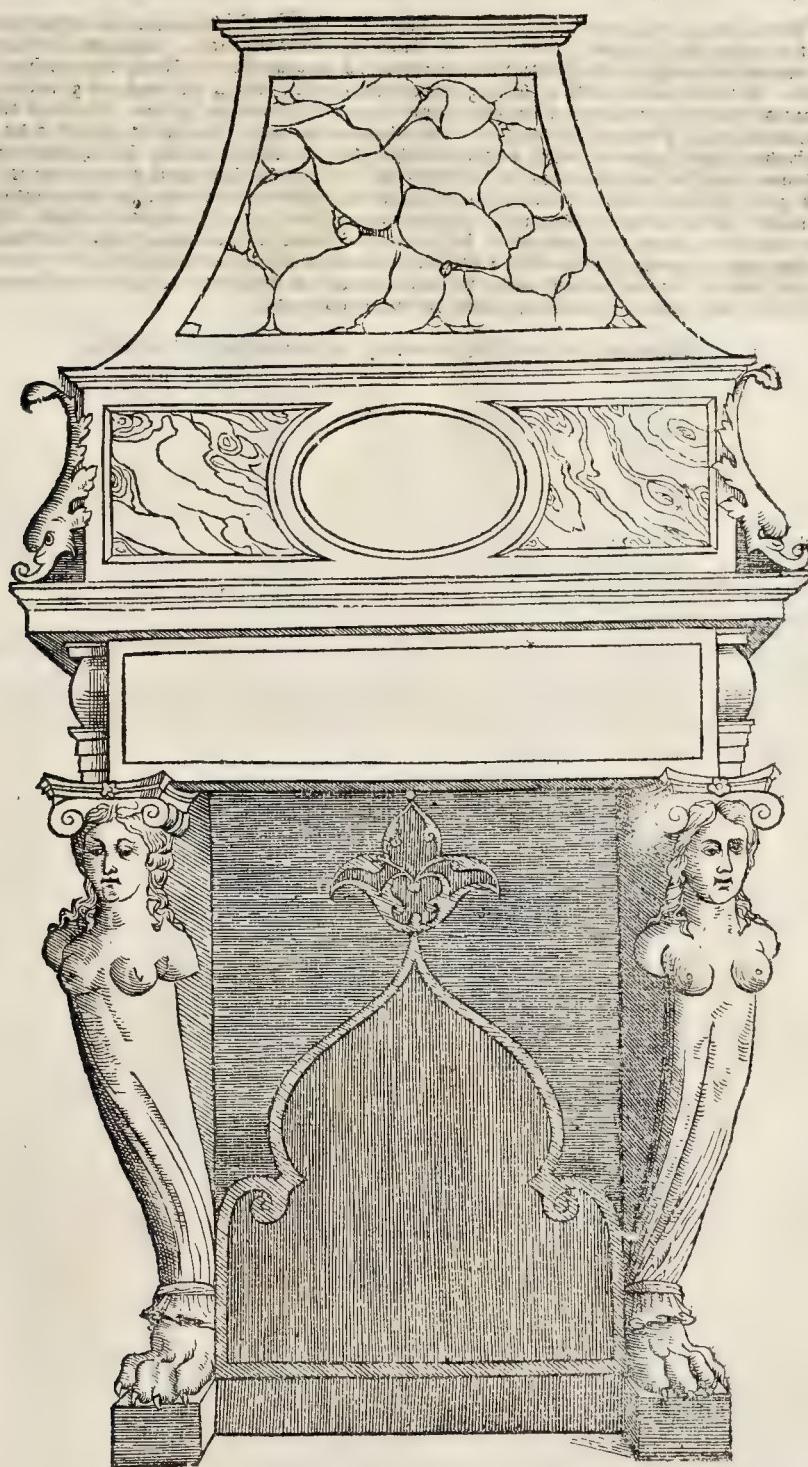


Of the Ionica

As it is said in the beginning of this Booke, the maner and order of the Ionica being made after the Feminine kind, it is so likewise a materiall thing, that haung a Chimney to make of that order, wee must, as nare as we can, make some shew of that sexe therein: the proportion whereof shalbe thus, that y height of the opennesse, being placed, it shalbe from the ground of the Chamber or Hall, to the Architraue, eyght parts high, and that shall be according to the placing of the Columnes, whiche shalbe such like monstres or strange formes (as we call them) made in this maner, whiche shal serue for Apogallions. The Architraue, Frise and Cornice, shall be the fourth part of the height, as it is before sayd. The Table vpon the Capitals, which covereth the Architraue and the Frise, I judge, that ancient workemen haue used to finde more space to wnts in, and also, for that they were desirous of novelties: which table, whether it be made or not made, is referred to the will of the workeman. The second order, with the Dolphins, is made for two casles, the one is, to make the mouth of the Chimney, which doeth receyue the smoke wider: the other is, to make a Piramicall forme, making the necke of the Chimney in a Chamber, but it is still at the will of the workeman, to make them more or lesse, or not at all.

The fourth Booke,

The seuenth Chapter. Fol. 42



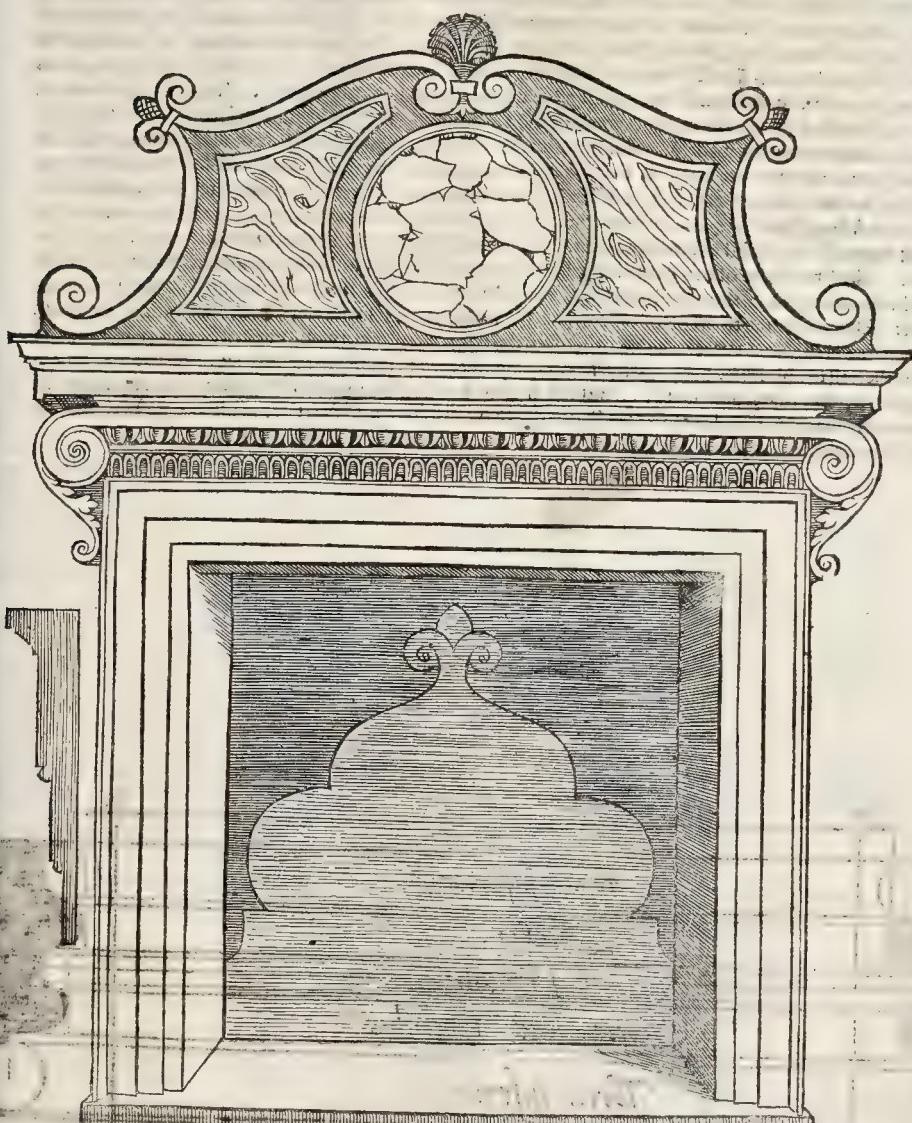
Of the Ionica

This other maner of Chimney is very easie for small romes, and they are bled to be made lower then a mans height, that the fire, which is enemy to mens eyes, may warne the rest of a mans body. The widenesse of this Chimney is a full foursquare: the Pilaster shall have a sixt part of the widenesse: the Climatic the seventh part of the Pilaster. Of the rest you may make 12. parts, 3. shalbe given to the first Facie, 4. the second, and 5. the third Facie: and for more beautifying, a man may also make the Alfragals, as you see them here in the Gess. The height of the Volutes shalbe like the 3. Facies without the Climatic, and of them must be made 3. equal parts, one part for the Frise, with the chancelature or hollowing, and the other for the Echine, with the Alfragall and Lish, the third shall bee given to the Volutes, which shall hang on the sides like the Climatic, but the leaves shall hang downe as lowe as the Architrave. The height of the Corona, with the two Climatic, and the Scima, are like the second and thrid Facie, together with the Climatic: but the Projecture of Corona, Climatic, and Scima, each of them hold as much as the height. This like forme I haue made in worke, very well liked of: but, as is sayd of the other, if by occasion of two, he it taketh onermuch place, then you may make the Plasters of the 8. part of the widenesse, so will they be much more sparingly of themselves. That part made over for an Ornament, is also at the two, he mans will, for this Chimney is to stand in the thicknesse of a wall, so that this Ornament, of this Order, would serue for a window or doore.

Here endeth the Ionica Order of building: and there followeth the Corinthia.

The fourth Booke.

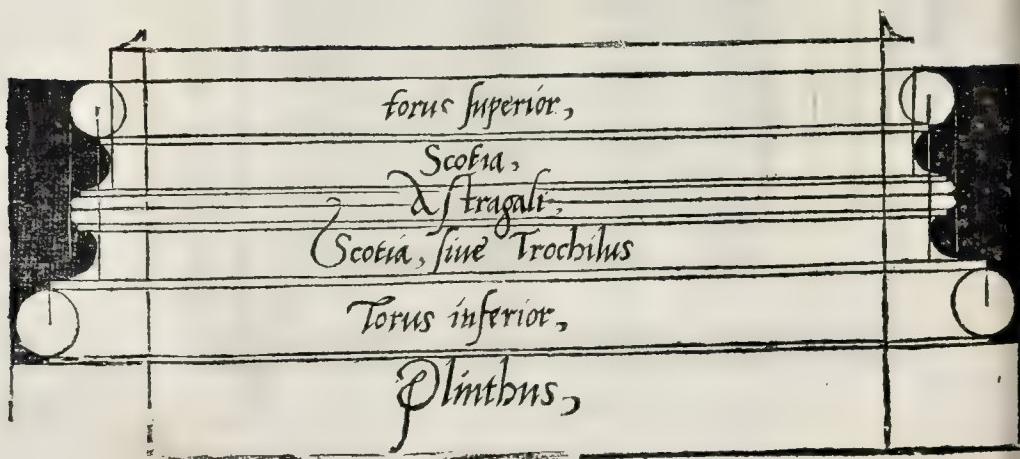
The seuenth Chapter. Fol. 44



Of the order of Corinthia worke, and the
Ornaments thereof.

The eyght Chapter.

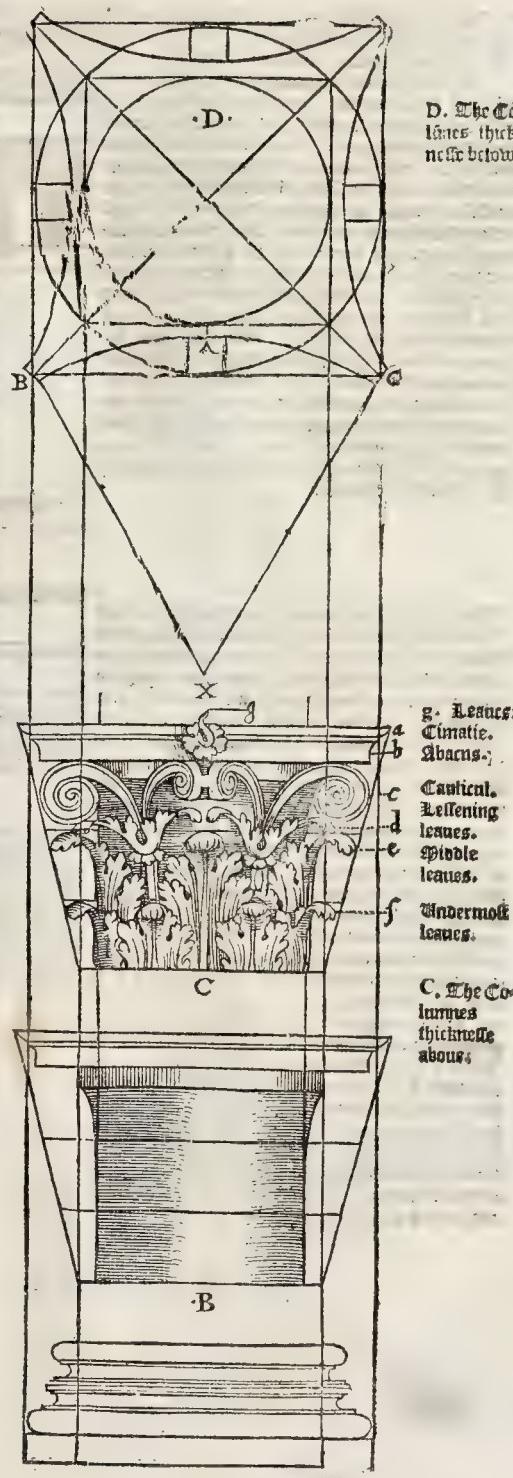
Of Corinthia worke, *Vitruvius* speaketh onely in his fourth Booke, and the first Chapter, in manneras if he would say, that the same, which is layd of the Ionica Columnne, is in Corinthia worke: and in his second Chapter hee speaketh of Mogdilions among the Coronas, therefore not giuing any other rules or measures of the other parts: but the ancient Romanes vsing this order of Corinthia much, (as also the rest) made the Bases of these Columnnes, with a great number of members or parts full of worke: of which Bases to set downe some rules, I will speake of one of the tayrest buildings in Rome, that is, the Pantheon, called by the name of Our Lady de Rotonde, setting downe all the measures thereof. The Columnne of Corinthia worke is made by a common rule, consisting of 9. parts in height, with Capitals and Bases: the Capitall whereof, shall be as high as the Columnne is thicke below, but the Base shall be of halfe the thickenesse of the Columnne. Of this halfe, or height of the Base, there shall be foure even parts made, whereof the one is for the Plinthus, the other three shall be deuided in five equall parts, whereof one part shall bee for the Thorus aboue, but the Thonus vnder shall be a fourth part thicker, so that which resteth shall be deuided into 2. even parts, whereof one part is for the Scotie below, with the Astragall, and two Lists or borders: that Astragalli shall be the sixt part, and each List or border the halfe thereof: but the list or border vnder the nethermost Thorus, shall bee a third part more then the other. The Projeciture of the Plinthus shall stand aboue in another order of Columnnes, making them like the Ionica order; but if the place be beneath vpon the ground, then the Projeciture shall be like the Dorica order. Also, according to the place where the Bases shalbe placed, so the workeman must adde or diminish, as is before sayd: for as these Bases stand beneath the sight, it will stand well; but if it bee placed aboue the sight, then all the places that are vied by the other members, with their seuerall distances, shall be made greater, then by this rule is prescribed. And the higher they be set, so much the lesse and fayrer seeme the members: herein the workeman of the Rotonde was well aduised, for that hee made the Bases aboue the first story within, with two Scoties, but yet with one Astragall alone, in stead of two.



The fourth Booke.

The seventh Chapter. Fol. 45

The derivation of the Capitall Corinthia, is as from a Dard of Corinthia: but so that Virruius in his fourth Booke and first Chapter describeth his petege, whereof I will not trouble my selfe to speake of; thus much I will say: If a woorke man had a Temple to make for the Virgin Mary, or any other Saints that were Virgins, or Houses or Sepulchres for persons of honest life and conuersation, then a man might use this manner of worke. The height of this Capital shall bee like the thicknesse of the Column below: the Abacus the seventh part of that height. Of the rest there halbe thre parts made: one for the leaves below; the other for the leaves in the middle; and the last for the Volutes, as we may call them. But betwix the Volutes and the middlemost leaves, there is a space left to the lesser leaves, from the which the Volutes grew. The Capital marked B. shall bee underneath like the Column above: vnder the Abacus, there is a Cintha made, the height whereof shall be halfe the Abacs: of which Abacus, thre parts being made, one shalbe for the Cimatic with the Lifs, and the rest for the Plinthus. Under the four corners of the Abacus, the greatest Volutes are made; and in the middle of the Abacus, there is a flower as great as the Abacus is thiche, vnder the which the least Volutes shalbe made, vnder the greatest, and also vnder the smalle Volutes, the middle leaves shalbe set, betwene the which the least leaves shall grow out, and out of them the Volutes spring. The middlemost, and also the undermost leaves, shall each be 8. in number, standing betwene each other, as the figure C. sheweth. The widenesse of the Abacus, from point to point, shalbe two Diameters of the Columns below: whiche Diameter shalbe placed in a 4. square, & a Circle drawne without the foursquare, whiche shall touch the four corners: then, without this great Circle, another foursquare being made, and denided in Diagonall, that is, crosse wise, those lines will shew to be two Diameters in length (as Virruius teacheth.) But from the line B. C. you shall make a perfitt Triangle: and vpon the corner X. shall be to make hollo in the Abacus: from the spaces, betwene the great Circle and the small, there shalbe four parts made, one part shal rest abone A. and thre shalbe thus taken away: the one sorte of the Compasse being set vpon X. the other vpon A. drawing about from B. to C. where the crooked line shall reach on the two sides of the Triangle, there shalbe the termination of the corners of the Capitals. The example is in the figure D. in this manner. The Abacus shall come in Perpendiculare, with the Plinthus of the Base.



D. The Col-
umnes thick-
nesse below.

g. Leaves:
Cimatic.
Abacs.

Capital.
Lessening
leaves.
Middle
leaves.

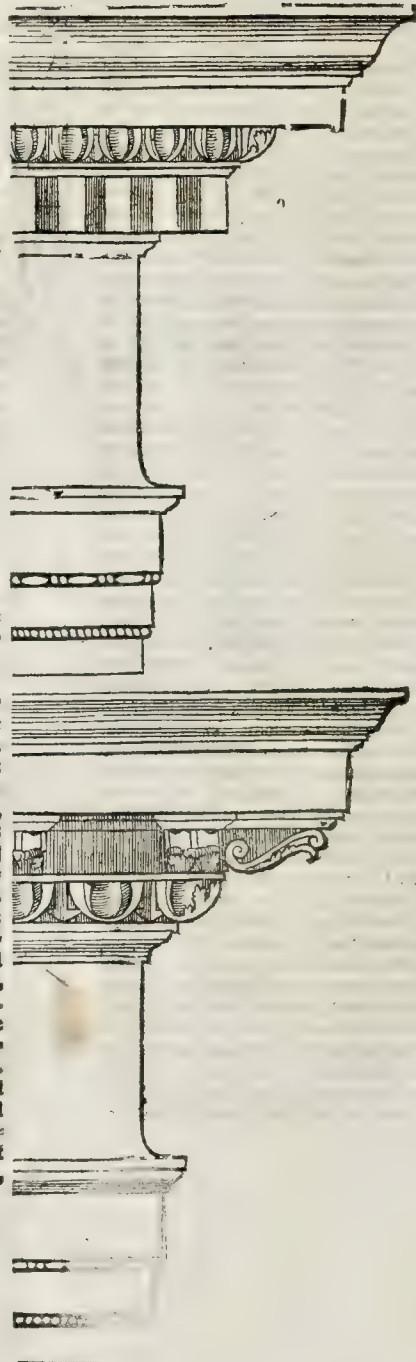
Undermost
leaves.

C. The Co-
lumnes
thicknesse
aboue.

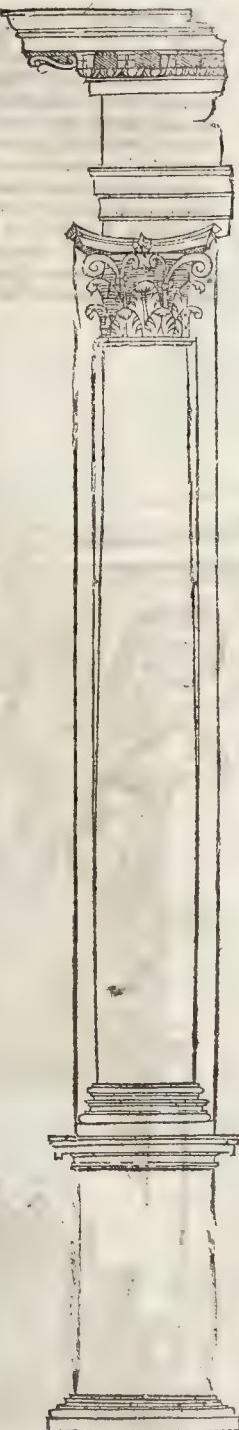
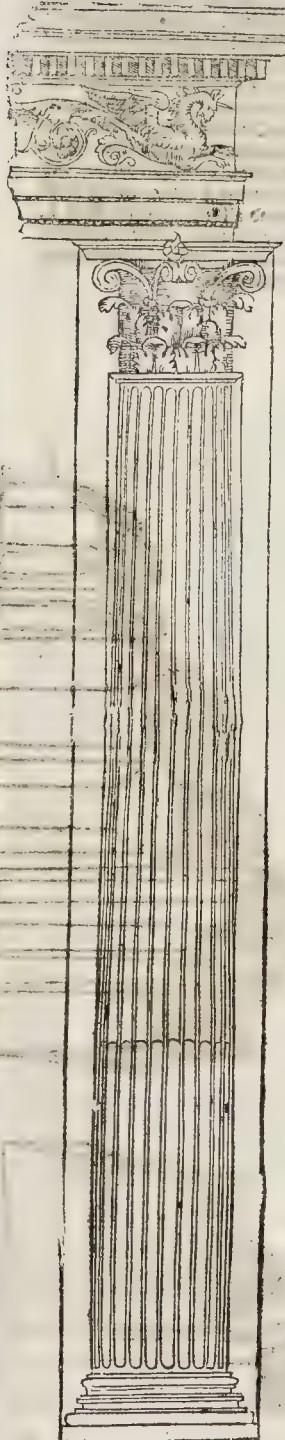
Of the Corinthia

TOuching the Architrave, Frise and Cornice of the Corinthia, as I have sayd in the beginning of this Chapter, Vitruvius setteth downe no meature thereof, although he setteth downe the originall of the Puttles, which may bee made in all manner of Cornices, as wee see in Antiquities: but to proced orderly, and not to leave Vitruvius writing to much, I will set the ornaments of Ionica in this Chapter, ading thereto the Astragall in the Architrave, and an Echinos under the Crotone, as some Arch-Architects in Rome have done. So I say, when the Architrave is made as it standeth by the Ionica, under the middlemost Facie, there shall be an Astragall made of the eight part of the same Facie, and under the uppermost Facie also, one of the eight parts of the layd Facie wrought with Leaf, as poule: after that, when the Frise is set with the Cimatic, and thereto the Denticales with the Cimatic, then you must place the Echine above it, of such height as the first Facie is, the which with the Projectures and cuttings, shall shew more than the middlemost Facie: above the Echine, you must set the Corona, Cimatic, and Sima, as it is sayd in the Ionica Order.

Some Romish workemen, proceeding with more boldnesse, haue not onely placed Echines above the Denticules, but also made Puttles and Dentiles together, in one Cornice, which is much condemned by Vitruvius in his fourth Booke, and second Chapter: soz that the Dentiles represent certaine lath, by Vitruvius called Asteri, and the Poggionis are for the supporting of other ends of wood, by the layd Author called Cantery: which two kind of beames may not stand together in one place; and I, for my part, could never endure Dentiles and Puttles in one Cornice, although Rome aboundeth therein, and divers places of Italy also: but proceeding orderly in this worke, I find a generall rule, that is, that the height of the Columnus with Basys and Capitals, shalbe divided in 4. parts, whereof one is given to the Architrave, Frise and Cornice, and such a height agreeth with the Donica: the fourth part shalbe denided in 10. parts: 3. shall be for the Architrave, as also sayd, 3. for the Frise, and 4. for the Cornice. But of those 4. there are 9. parts made, one shall bee for the Cimatic above the Frise, 2. for the Echine with the Lift, 2. for the Puttles with their Cimatic, 2. for the Corona, and the 2. last parts for the Sima, with her Cimatic, which shall be the fourth part of the Sima. The Project of all shall be as aforesayd: you may also make this Architrave, Frise and Cornice, of the first part of the height of the Column, as Vitruvius sayth in his fift Booke, and seventh Chapter of the Theater.

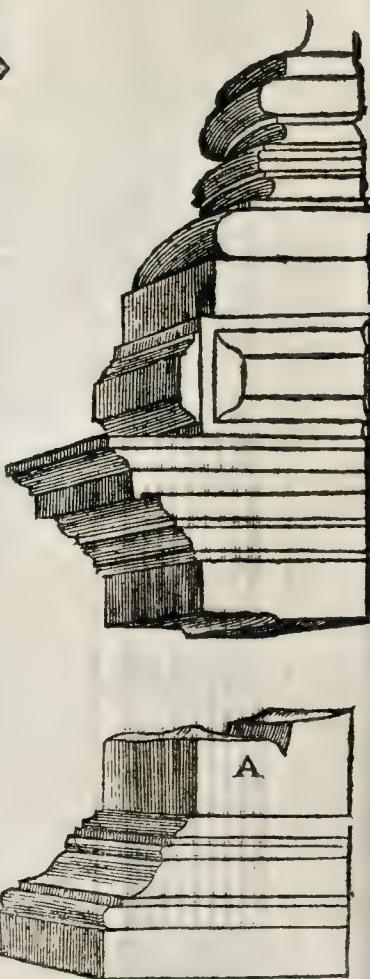


The lessening of the Corinthia Column shall be made, as it is said of the other; and also thereafter as the height is, but of 16. foot downwards; it shalbe lessened above the first part, by the rule aforesaid: and if it bee striked or chaneled; then you shall make it like the Ionica; but from the third part northwards the caruing or hollowing shall be full, as you see it in the Figure on the sides. The Corona is without Dutiles, whereof the Architrave is halfe the Columnes thickenesse; the Freese, so that it is cut, is the fourth part more then the Architrave; and the Cornice without the Cimatic of the Freese, is as high as the Architrave: the height of all together is somewhat lesse then the first part of the Column: nevertheless, if the Projecture of the Corona bee well made, then it will shew to bee higher then it is, and shall bee lesse waight upon the building: wherefore, that the skillful workman may chuse out those parts, that best serve his turne, that he may not exceed Virtuosis doctrine, and the good Antiquities, which men, by his writing, acknowledge, if by any accident this Column had need of a proportioned Pedestal, being not let by any occasion, then the proportion thereof shall be thus: the heighth shalbe deuided in 3. parts, whereof 2. parts shall bee for the height, that is, one fourth parts, and 2. third parts, (I meane the flat) which height shall be deuided in 7. parts: one for the Bases, one for the Cornice above, which shall in all be 9. parts, proportioned according to the Column: but of the particular members of the Bases and Cornices, I will here stirr them more, with some Antiquities, whereof men may take such measure as shall best serve their turnes.



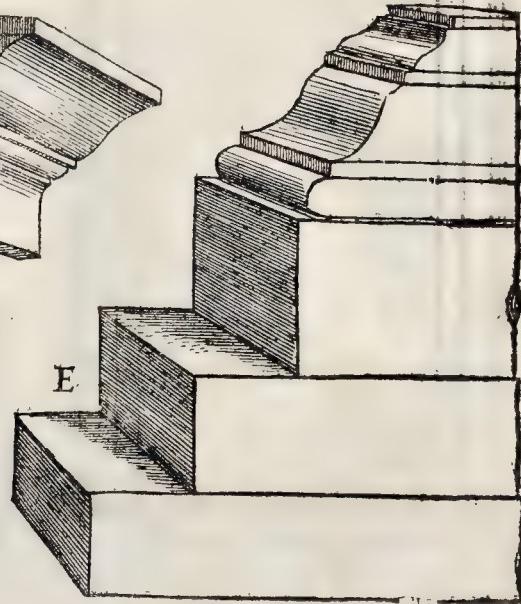
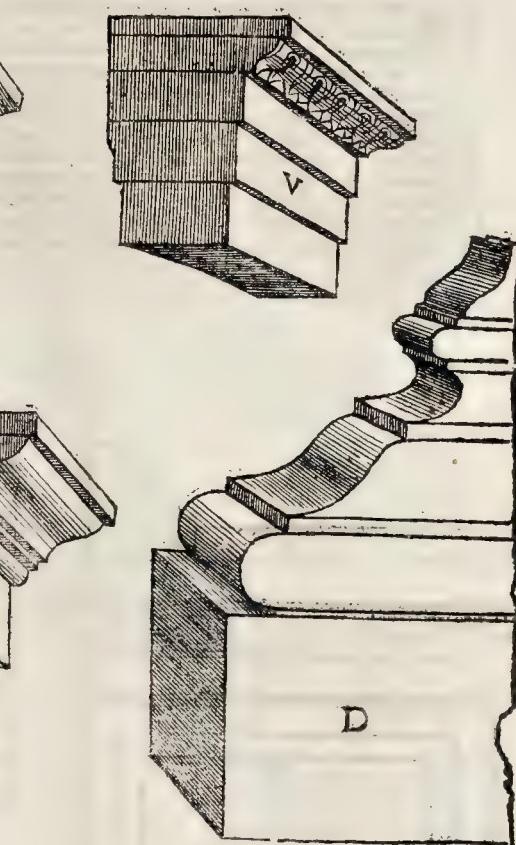
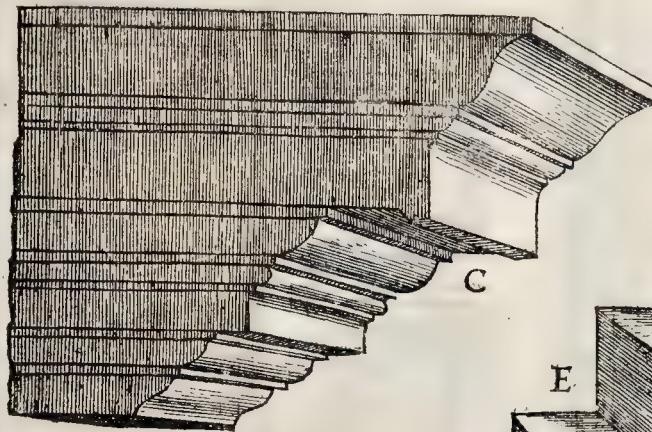
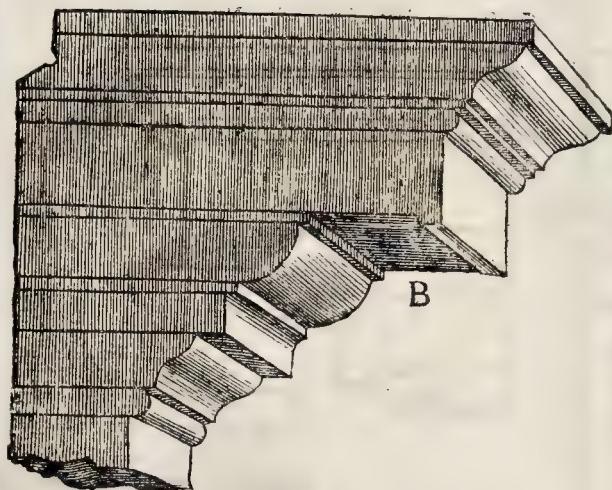
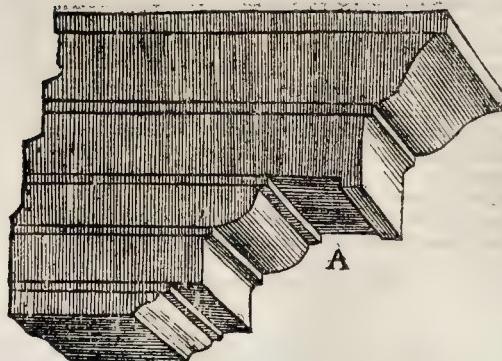
Of the Corinthia

Among other Antiquities of the Corinthia, which are seene in Italy, I thinke the Pantheon of Rome, and the Arch triumphant, at the Haven of Ancona, are the sayest and best to be seene; of which Arch, the Capital hereunder marked A. is with great care proportioned after the great; whiche height is contrary to the writing of Vitruvius: nevertheless, it had good correspondence; it may be, that Vitruvius meant, that the height of the Capitall should be one Columnnes thickenes without the Abacus: but the text herein is falsified, for that I haue not only found this Capital, but others more of such proportion. The Columnnes hereof are chaneled, as it is shewed here: the Pedestall with the Base vpon it, is a member of the same Arch, also proportioned in the small. The Caprice hereunto added, was found at Al foro transitorio in Rome: that marked with A. is very handsome, for a Corinthian Caprice without Proportions: that marked with B. is a little sayer, but that with C. is the unhandsomest, because of the double parts, which haue no good grace from the Coazona downwardes, and also, for that the Coazona, vpon so much Cornice, hath so small Proportion. The Base of the Pedestall marked D. in my opinion, is very sayre, and also the Vallement with E. I thinke hath bene a thing that hath continued in some building: whiche things, altogether, men may apply to the order of Corinthia, and in the Ionica I haue seene the like. The Architacte V. is in Verona, in an Arch triumphant, which facies standeth contrary to Vitruvius writing: yet I haue set them here to shew such difference.



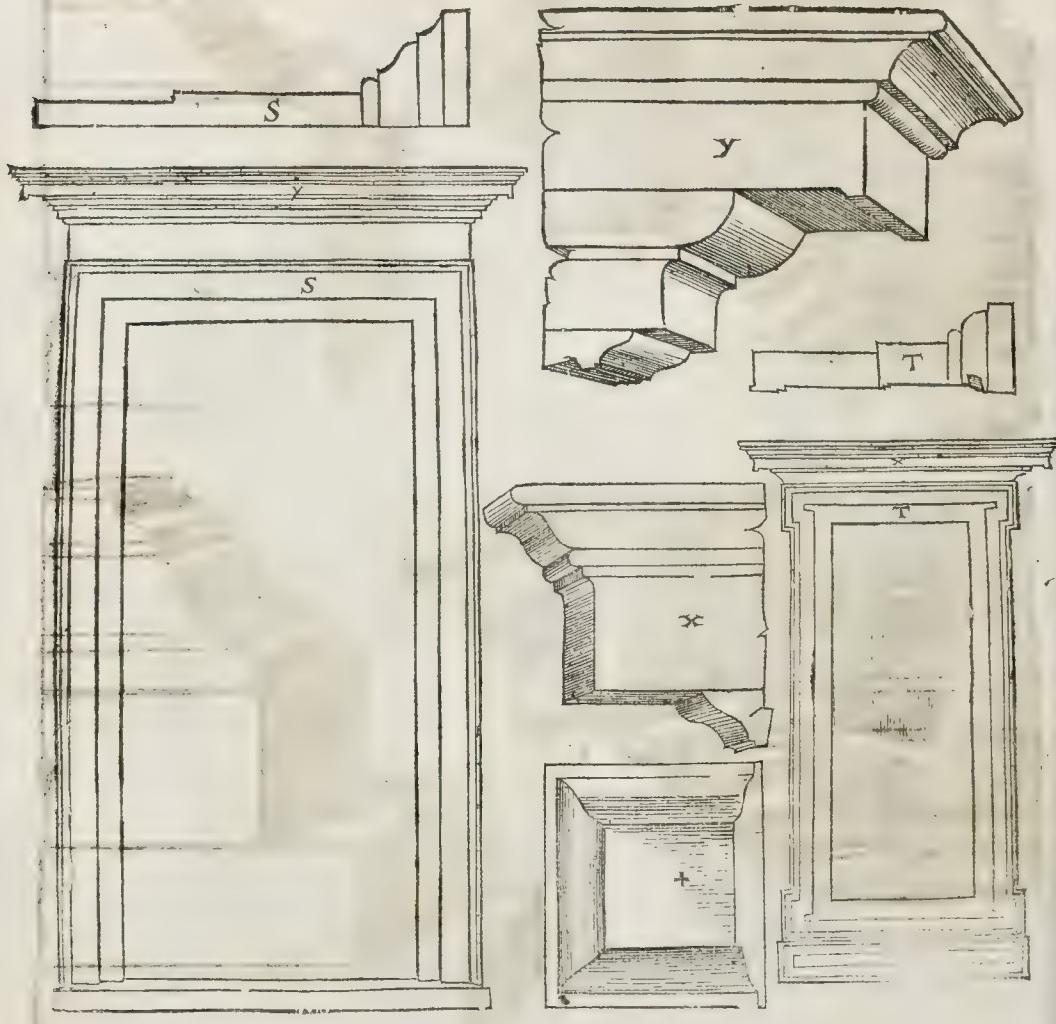
The fourth Booke.

The eyght Chapter. Fol. 47



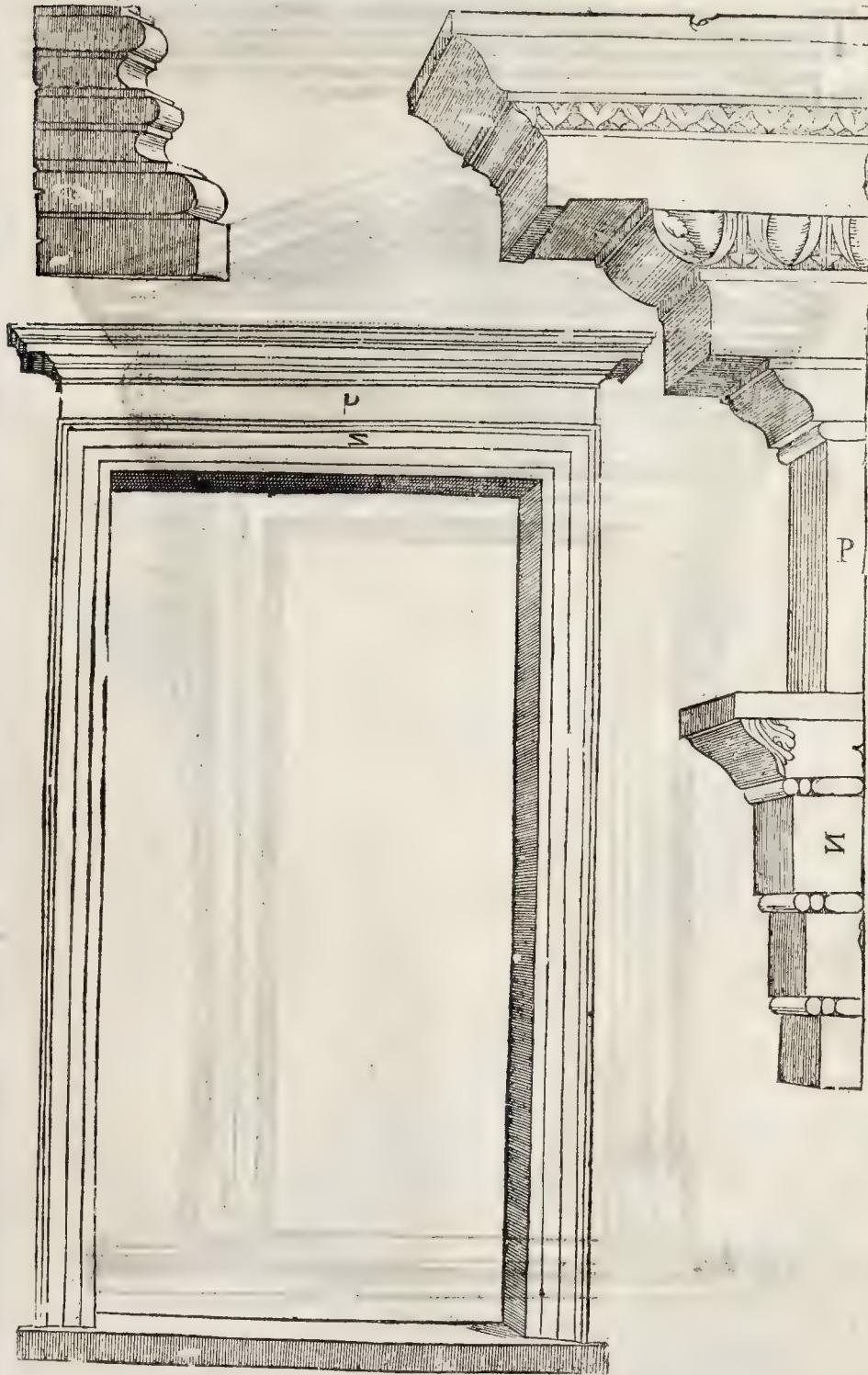
Of the Corinthia

Of the doores of Corinthia worke, Virgilius speaketh nothing at all; but I will speake of the Antiquities which are yet to be seene. The Gate or doore marked S. Y. is at I wch. upon the River of Auere, in a round Temple made after the Corinthia maner, whiche doore is lessened aboue the eyghteenth part. The height is about 2. 4. squares: the rest of the members are proportioned after the great. The window T. and X. is in the same Temple, and lessened aboue like the doore: the Pilasters or Antyagumentum are all proportioned, which a man may finde by the Compasse. The doore following, marked P. Z. is that of the Pantheon in Rome, also Corinthia worke; which is 20. ancient Palmeres broad: the hight 40. And it is said, that the Antyagumentum is all of one piece, and I alio haue seene no other. The Antyagumentum of this doore is the breadth of the 8. parts of the light therof, and in the sides it is of a good thickenes. But soz that you cannot see the fust, without seing a part of the sides, therefore it seemeth to such as looke on it, to be broader then in effect it is. And this doore, because it is so high, comes in P-pendicular, and is not lessened as the other aforesayd: all the other members are proportioned according to the greatness. The Gate above the Gate, is like that of flat Columnes above the fift order, whiche I haue set downe by the Corinthia.



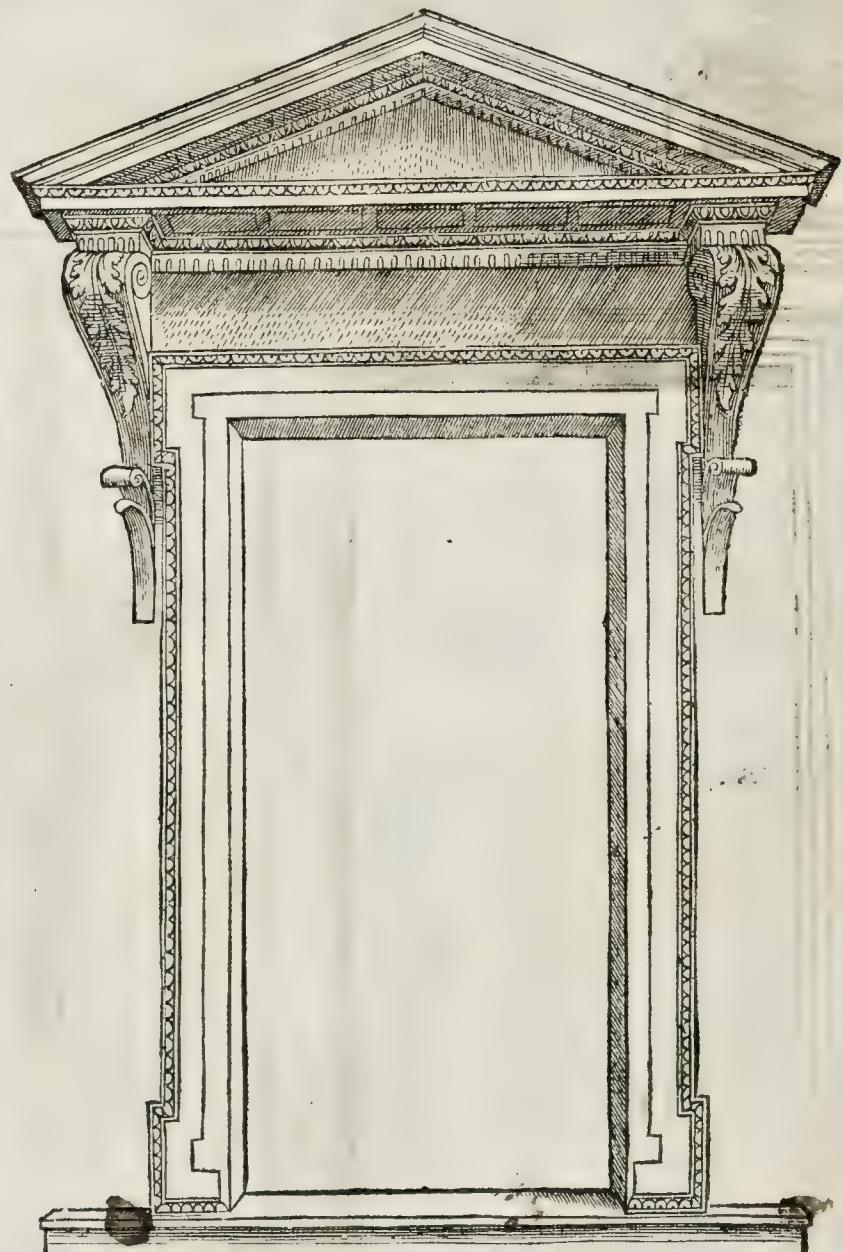
The fourth Booke.

The seuenth Chapter. Fol. 48



Of the Corinthia

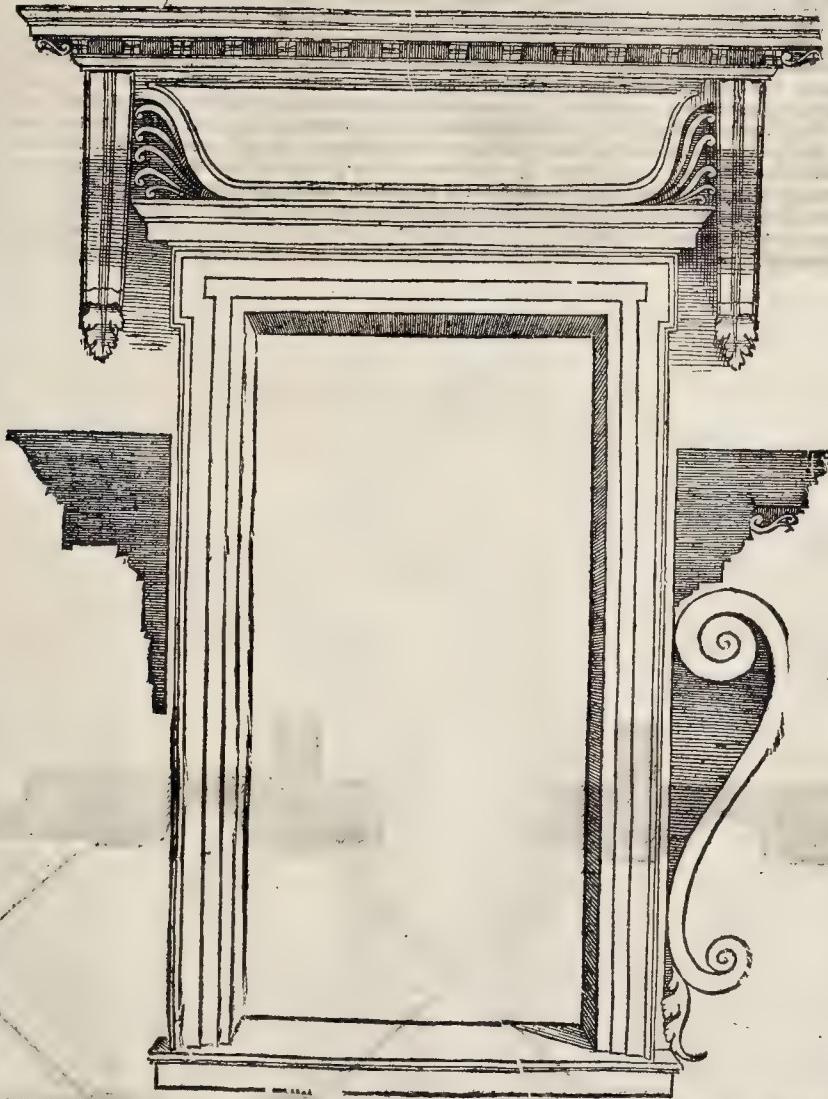
The doore hereunder set downe, is at Palestina, and is Corinthia: the wideresse is 2. sorresquares: the Antepage
mentome or the Pilaster is bread the first part of the widenes, bruided in maner aforesaid. The Sophoste or fere
is the fourth part more then the Supercilie. The Corona and the rest, are like the Supercilie, bruided as you see
in the figure. The Prothyrdes or Arcenes, with that which is vpon them, hang so lightly or losely, as poule.
The Frontispiece is made, as in the order of Dorica, in the second Facie, is sayd.



The fourth Booke.

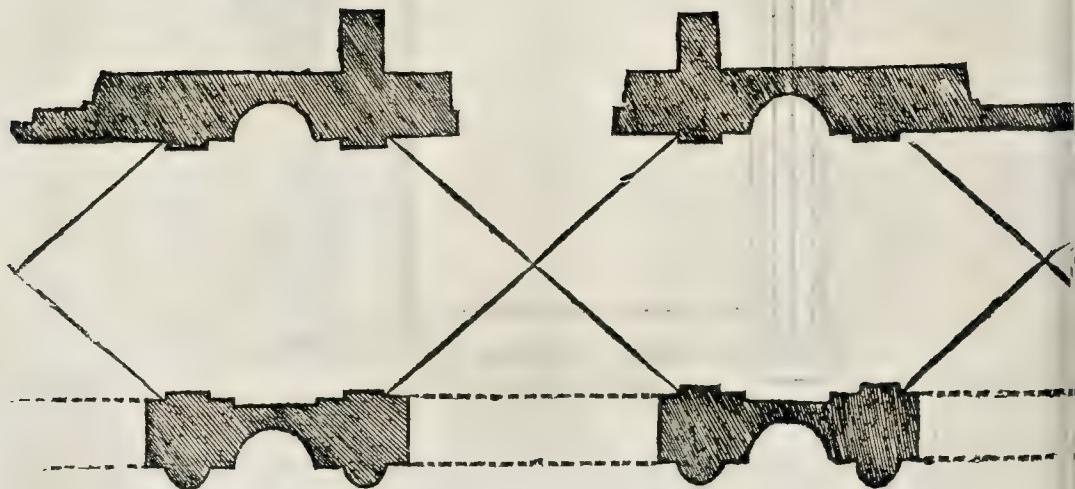
The eyght Chapter. Fol. 49

Although this Dore differeth from all the other, that ever I saw in any Antiquitie, nevertheless, it is very pleasant to the sight, and sheweth well: which Dore is without Spoleto, about halfe a mile without the way, in an ancient Temple, made of the Corinthia maner; of the proportion and particular members, I will say nothing, for hee that lacketh knowledge, may find it with a Compasse.



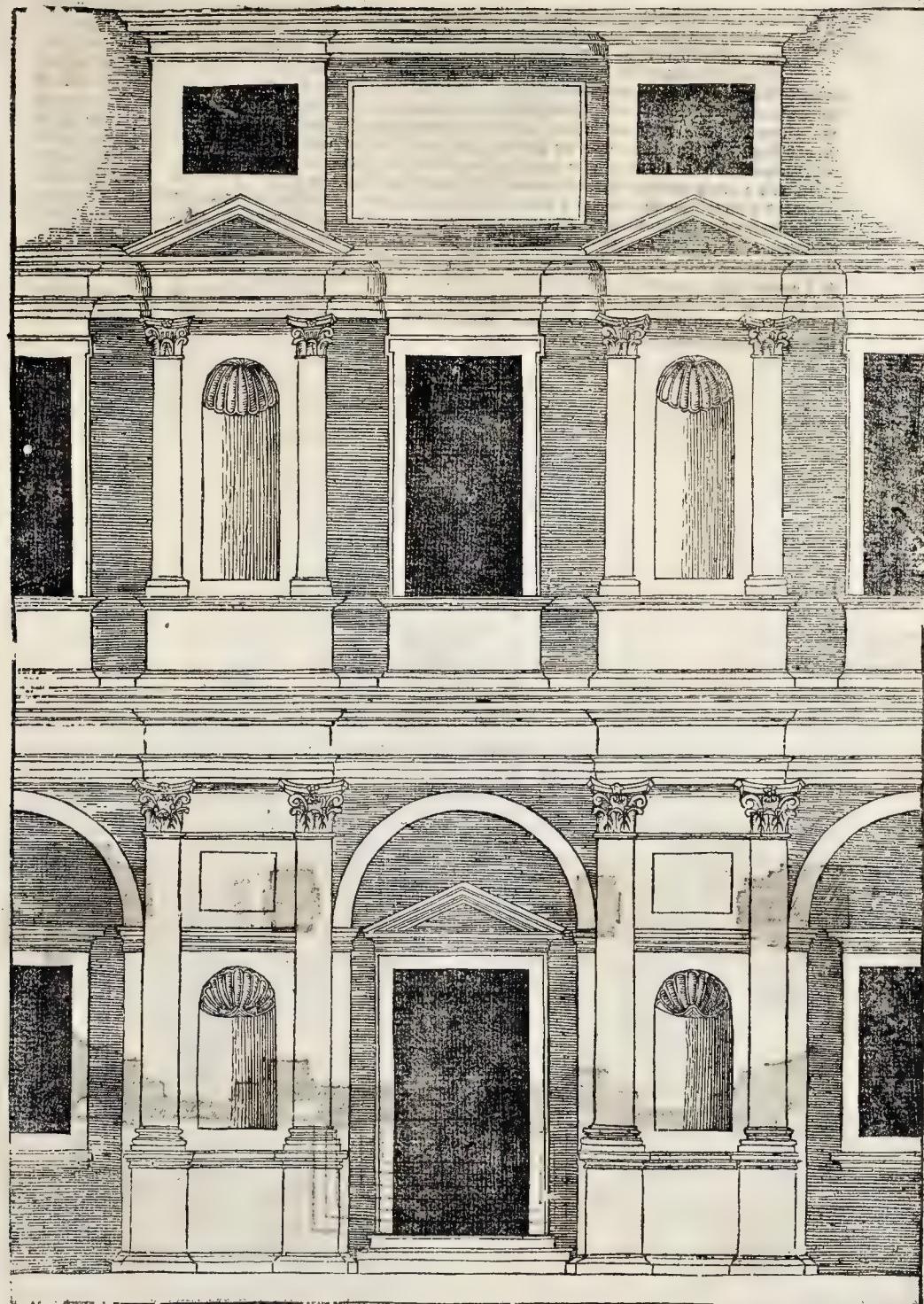
Of Corinthia

If this Order of Corinthia, which is pleasing unto all men, I will make more sortes of buildings, setting downe some generall rules, to satisfie those that take pleasure to read this worke: and soz that ancient workemen, in times past, that desired to make their things strong and everlastyng, made Pillars (wherein the Pilasters are closed) which beare vp the Arches of a great thicknesse; for that cause, the Forefront or Facie ening hath the Pillar (that is, the whole body) as broad before as the widenesse of the Arch is; but the thicknesse is 1. fourth part leesse. The thickenesse of the Columnnes shall bee a fift part of the pillar. The Pictures betweene the Columnnes are 2. Columnnes thickenesse in breadth: their height is somewhat leesse then 2. fourresquares. The height of the Pedestals of 3. Columnnes thickenesse. The height of the Arch shalbe made of 2. fourresquares. The height of the Columnnes with Bases and Capitalis, shalbe 9. parts and a halfe. The breadth of the Arch with the Pilasters, shalbe of halfe a Columnne. The Impost which beareth the Arch, shalbe of the same height, made, in maner, like that of the Theater of Marcellus, in the Order of Ionica: which Impost shall serue for a Cornice above the doore: but the height of the doore shalbe made thus: Under the sayd Cornice, the Supercilie shalbe also made of the like height; and from thence downwards there shalbe 2. equal parts made to the Stoyes; whereof, one shalbe the breadth of the light, and therwile the Cornice of the doore, as the eyes, shall come with the windowes, and the Circarie of the Pedestall shall also come in like sorte under the windowes. The light of the windowes shalbe taken Diagonall wise: and the Antepagmentum a fift part of the light. The particular members of the Pedestall, Base and Capitalis, shalbe made, as in the first part of this Order it is sayd. Above the Columnnes, the Architrave, Freize and Cornice shalbe set, denide in such maner as is shewed in the beginning. The height of the second Stoy shalbe a fourth part leesse then the first, and all the member's lesened accordingly, as you may see and measure it in the figure: the elevation above this I settene not for a whole Stoy, but much lower: the hight thereof is as much as the widenesse of the Arch below; and the Cornice which serueth for Architrave, and Freze, shalbe the fift part of the hight of that Stoy, which measures you may take from the Capitall Doore: and for more Ornament, a man may set a Fassidges above: but setting it in the middle, it would hardly agree with the two small above the Pictures, unlesse it ran round, whereby the worke shoulde be changed, and shew better to the sight.



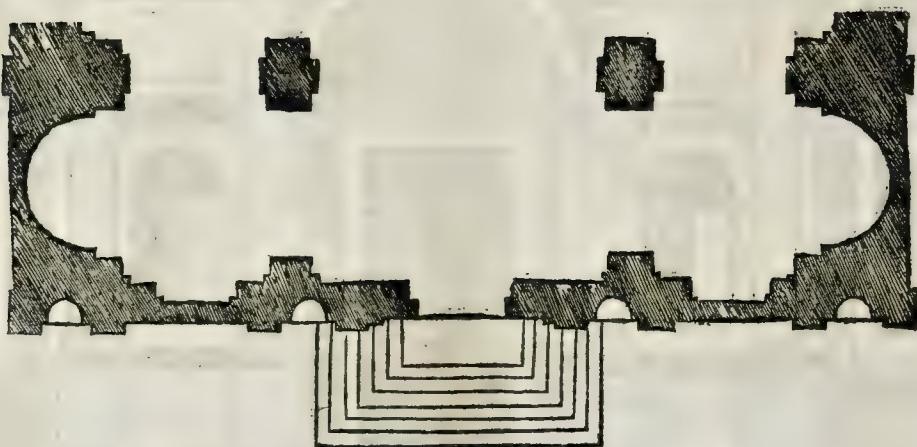
The fourth Booke.

The eyght Chapter. Fol. 50



Of the Corinthia

When a workeman will build a Temple, the higher the ground or Pavement is elevated, so much slaterly the building will shew; so right ancient workemen haue done, although they vset other forms of Temples, much different from this here set downe: so; they made a body alone, but vee, that are Christians, make our Temples in three parts, setting one part in the middle, and 2. parts on the sides: and sometimes the Chappels are made without the sides, as you see in the ground. The widenesse of this Facie shall be of 32. parts: one wherof shalbe the thicknes of a Columnne: the middlemost inter-Columns shall containe 7. parts: the greatest inter-Columnes on the sides shall bee 4. parts and an halfe. The inter-Columne with the Niche shall be 2. parts: and so the 32. parts shalbe distributed. The Arches with the Pilasters shall be halfe a Columnme broad: the widenesse of the Dore shall be of 3. parts and an halfe: the height of 7. parts: the Impost under the Arch is as broad as the Arch. The height of the Pevestall is 3. parts: the height of the Columnne, with Capitall and Bases, is 9. parts and a halfe. The Architrave, Frise and Cognice shalbe the fourth part of the height of the Columnnes: and so for the particular members and parts resting, the first rule shalbe obserued. The windowes, Niches and other ornaments, a man may conceare in the figure and measure. The second Ioyce shalbe a fourth part shortter then the first, and all the members lefened accordingly: but the Architrave, Frise & Cognice, shalbe placed in 3. equal parts, as I sayd of the other. The Fasicles shalbe made, as Vitruvius hath shewed in the order of Dorica. The 2. sides that stand for beautifying and upholding, shall bee the fourth part of a Circle, whereof A. and B. is the Center; and above each Arch that parteth the Chappels, a man may set such things, which will be a great upholding to the middlemost worke, and also along upon them, the water may fall from the uppermost roose to the nethermost.



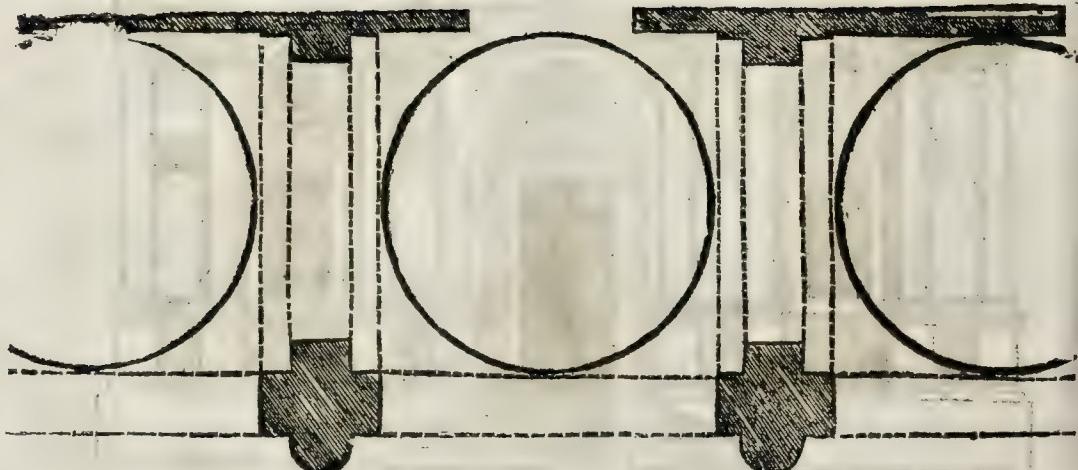
The fourth Booke.

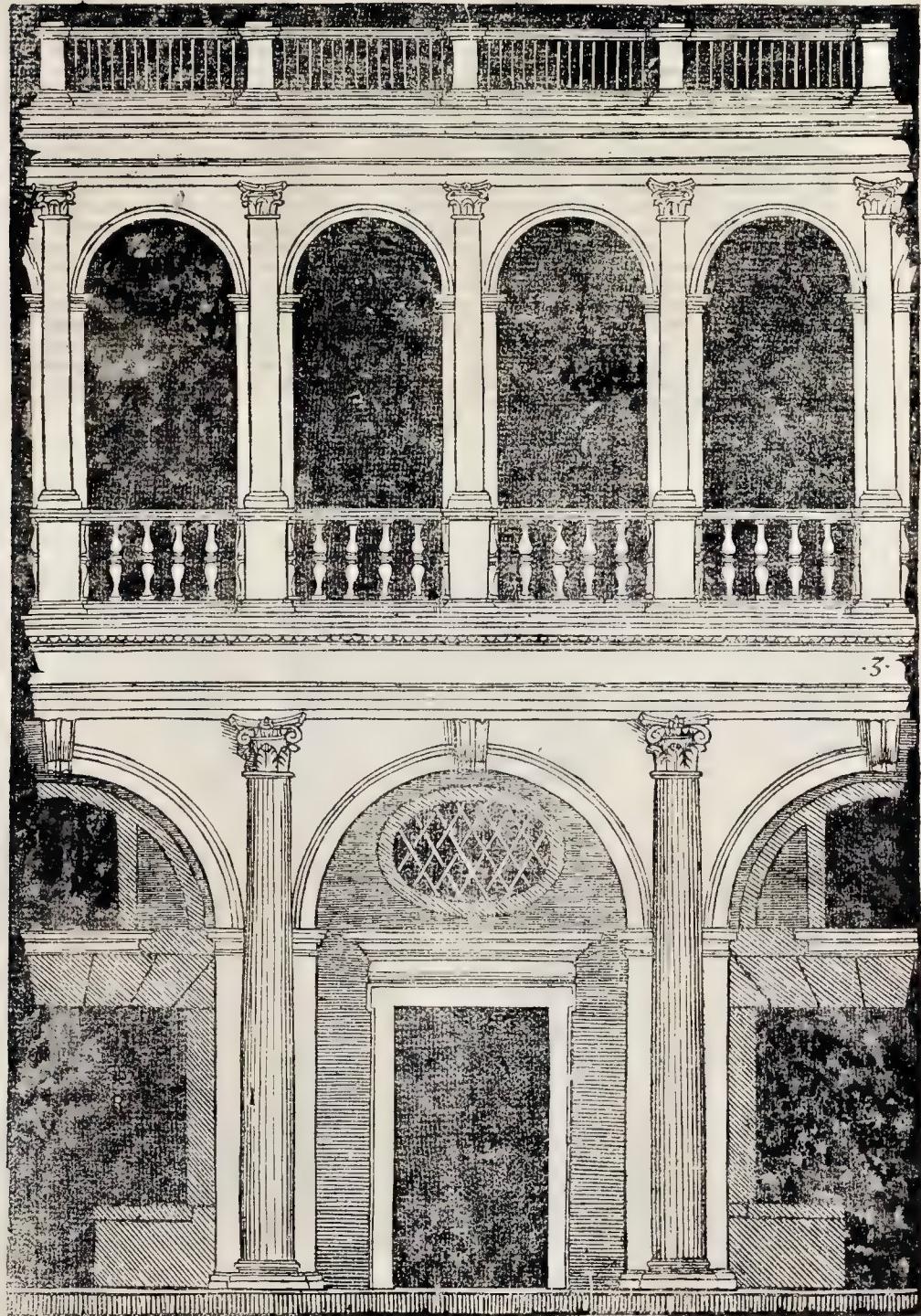
The eyght Chapter. Fol. 51



Of the Corinthia

The deuiding of this worke ensuing shalbe thus, that the Pillar shalbe the third part of the bidenesse of the Arch, but the thickenesse of the first part: the thickenesse of the Columnne also as much. The height with Bale and Capital of ten parts and an halfe: the Arch, Pilaster, and impost of the halfe Columnne: the measure of the Impost a man may take from the Dorica Chapter, altering the members: the same shall also serue for a Cornice above the doore, and for supporting of the windows above the shoppes: the height of the Arch (for sometimes vpon occasion, a man shall be forced to haue it so lowe as you see) shall be of 3. parts in the breadth, and 5. in height: and the doore also shall haue the same proportion. The Antepagmentum shall be the first part of the light, and if the workeman will make the height of the Arch of double proportion, the doore also will be of such proportion; but the Columnnes shalbe need a great bles under th Bales, with which things ancient workemen holpe themselves. The height of the Architrave, Fræle, and Cornice are of 2. Columnnes thickenesse, as it is said in the first part of the rules, or in manner of some Antiquities aforesayed. And for that the space under the Arch to the soller, which is even with the flat of the Cornice, shoulde be to great to make crofswise, in such case my aduise shoulde be, to make an Arch right behind the Columnne, and to make each space kettewise, as you see in the ground. The height of the second stopy shalbe one 4. part lesse then the first, deuided in this manner: the Podium shall bee as high as the thickenesse of two of the lowest Columnnes, and from thence vpwards shall be made 5. parts, one for the Architrave, Fræle and Chynie, and 4. for the Columnnes: the Arches with the Plasters shalbe of halfe a Columnne; and for the rest, you shall obserue the general rule: and if the Facie standeth in any place ou market, as it is shewed by the winkles of shoppes, it shalbe easie and comely to make a leaning aboue the uppermost Cornice: but for safety from rayne, snow, and frost, aboue all other things, it shalbe requisite to make a roose of panement well cloed and leaning foward, because of the water: but it will be surer, if it be covered with lead. And although good workemen condemne and shun the setting of a Columnne in an empie place, which I also command not, neuerthelesse, for that I haue faine the like matter vpon the Porticus of Pompey in Rome, but made after the Dorica maner, therfore I haue presumed to set the like, if it may serue any mans turne.





Of the Corinthia

For that the Venetians, in their buildings, b[e] much Corinthia woyke, and also many windowes and Podiums, therfore I have made one here, which is full of windowes & Podiums, & have also made Story vpon Story, which is more commodious then bearings out and leanings ouer are, and the building will haue a better shew; for that all the things whiche a man may see within, will be seamey. The Comportition of this Facie Hall be thus: The bredth shallbe deuided in 30. parts, and one of thone parts shalbe the thicknesse of a Column: the middlemost Intercolumnnes shalbe of 4. but all the rest of 3. and so the 30. parts shalbe distributed. The height of the Columnes shalbe of 10. parts & a halfe, with Bases and Capitals. The Architraue, Frise and Cognice shall, together, be the fift part of the height of the Columnes. The members shalbe druyed, as aoyelaw. The light of the Windowes are a Column and a halfe wide, all in Perpendicular from the top to the bottome: but the height of the first windowes are of 3. parts broad, and 4. high: and those that shall stand vpon them, haue their height in Diagonall maner. The widenesse of the Doore shalbe of 2. Columnes: and the height 4. The Antepagmentum, with the Supercellie, Frise, and Cognice, shalbe deuided, as it is sayd of the other before; and so shall the Cognice also of the Doore be, as the windowes below are. The second Story shalbe lower then the first the fourth part: but the leanings with the Balusters being made, as high as a window is broad, the rest of the height shalbe deuided in 5. parts: one for the Architraue, Frise and Cognice, and the other 4. for the Columnes, with Bases and Capitals. The height of the windowes shalbe of 2. fourfquares: with the rest of the Dynamens, you must doe as I haue lapp of the like: and also the Doore of the Gallery shalbe like that below. The third Story shalbe lessened more then the second one somwhat part, and every member proportionably; onely, the height of the windowes, they shalbe of 2. fourfquares, and rather higher then lower, because the height of it selfe lesserneth: The elevation also in the middle, shalbe the fourth part lessened, as it is sayd of the other. The Architraue, Frise and Cognice are the fourth part of that height. The Faltigium shalbe made, as it is sayd of the Doixa Temple: and if there remayne h[er]e other measures, you must awayes turne to the first rule. Hereunder I will set no flat ground: for the Perspectives of the Galleries shew all clearly.

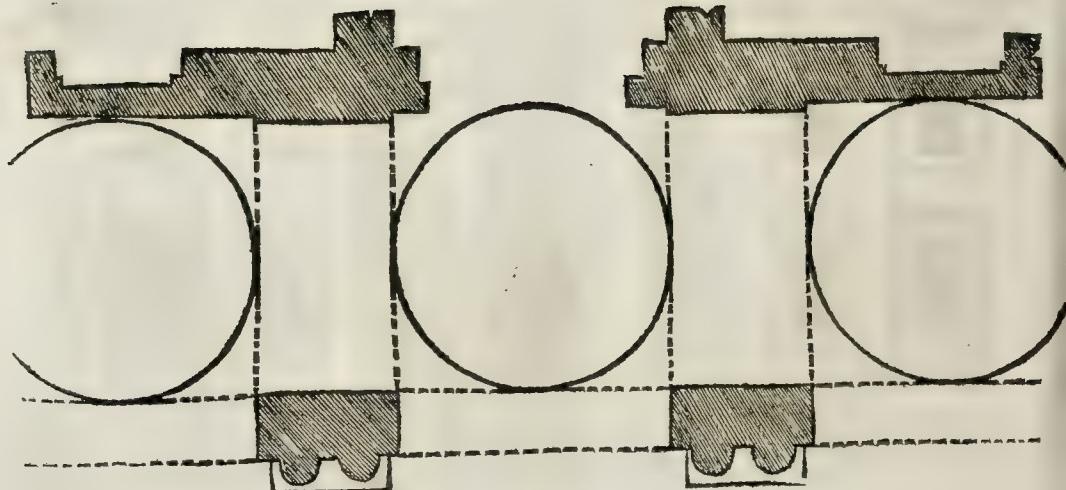
The fourth Booke.

The eyght Chapter. Fol. 52



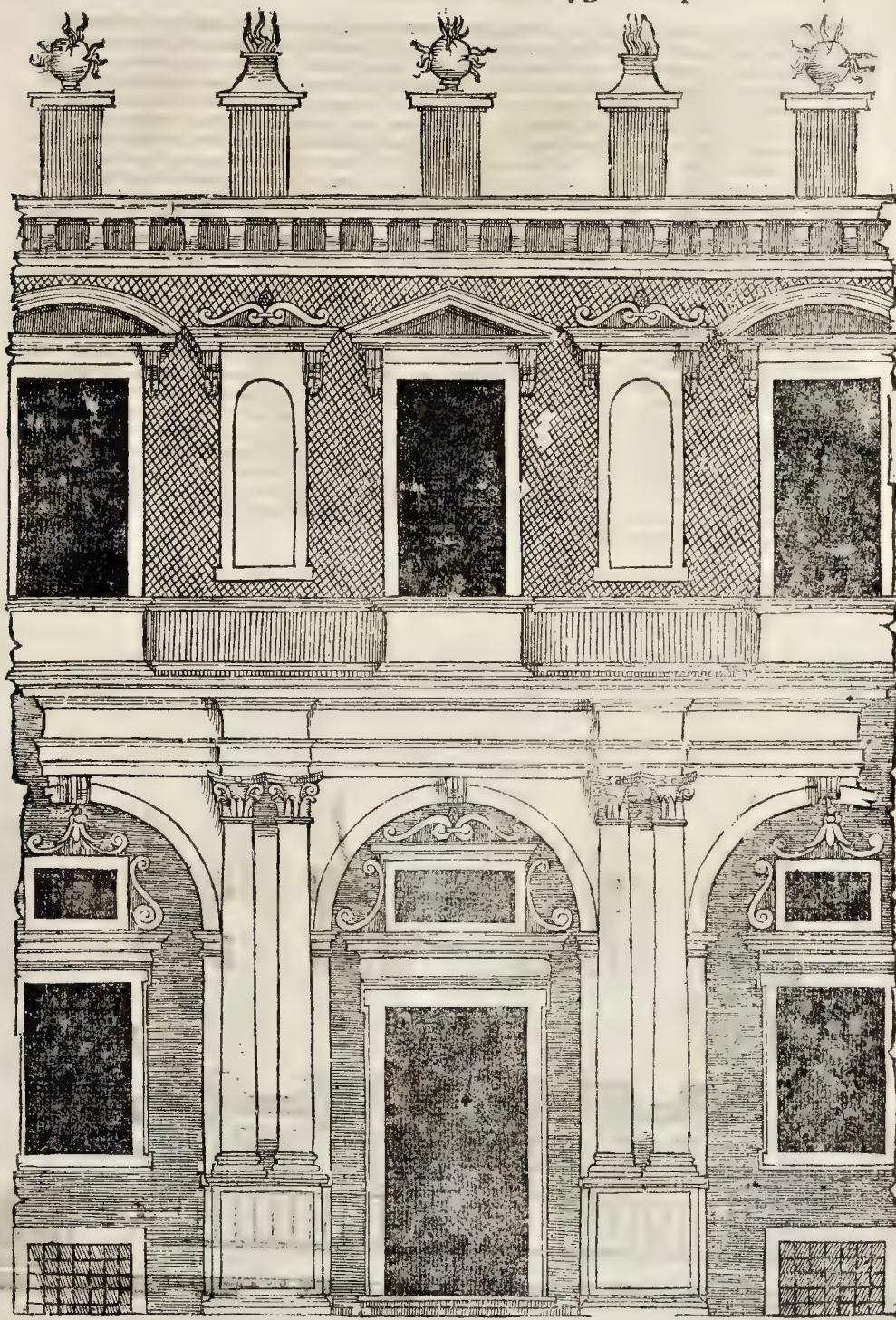
Of the Corinthia

AS I haue at other times said, that the workeman shall haue Columnes insto, but yet so shor, that sometimes they wil not serue his turne, knesse the industrie and cunning of the iognian bee such, that he can helpe him self therewith. The composition of this Facie shall bee thus, that the wiuenesse of an Arch shall be of double height in breadth: the Pillar shall be halfe the same wiuenesse before: but that Pillar being made in thre parts and am halfe, one part thereof halbe the thickenesse of one Column: The inter:Columne of a halfe Columne and so much also the Pillars and the Arch hold. The height of the Pedestals, without the Plinthus under them, shallbe as much as the whole breadth of the Pilaster, the members being deuided, as I haue layd of the Pedestals of Corinthia. The height of the Columne, with Bases and Capitals shallbe of 11. parts, and that shall not therefore be false, for it is set fast on a stome, more for ornament, then for byholding of any waight. The height of the Architrane, Fraile, and Cornice shall be made of the fourth part of the Columnes, and in Perpendicular the Columnes shall bear out all the members without the Corona or Cuna, which will goe right through without crookening, for good Antiquities doe to doe for and Bramans also, the light of Architecture in our age, made such a houle in Rome, called Belvedere. The wiuenesse of the doore, shallbe of four Columnes thickenesse, and twice as high. The Antepagmentum, Supercille, and Fraile, shall bee made so, that the Cornices, which vphold the Columnes, shall serue also above the doore, and also ouer the wiuenesses. The wiuenesse whereof shall bee of thre Columnes thickenesse, and the height of five. The second Story shall be leſſe then the first, the fourth part: but the whole height being deuided in 6. one shall be for the Podium, four for the spaces of the wiuenesses, and the other for the Architrane, Fraile and Cornice, deuided in such manner, as you shall see it in the order of Composita. The wiuenesses of the wiuenesses are in Perpendicular to the nethermost; and the breadth twise in the height: the rest of the ornaments, as wiuenesses and Niches, shallbe done as in this Ionica Oate is shewed, which being wrought with more lueynesse and flourishings, will bee a Corinthian worke. The breadth of the Niches with the Pilasters, shallbe in Perpendicular about the Columnes, but the wiuenesse thereof, being deuided in 7. this halbe for one Niche, and 2. for the Pilasters. The height halbe of 3. breadths, because they stand farre from sight, whereby they shew shorter. The Pillars above the Cornice are made for ornament, and also for commoditie, to make Chimneys of some of them.



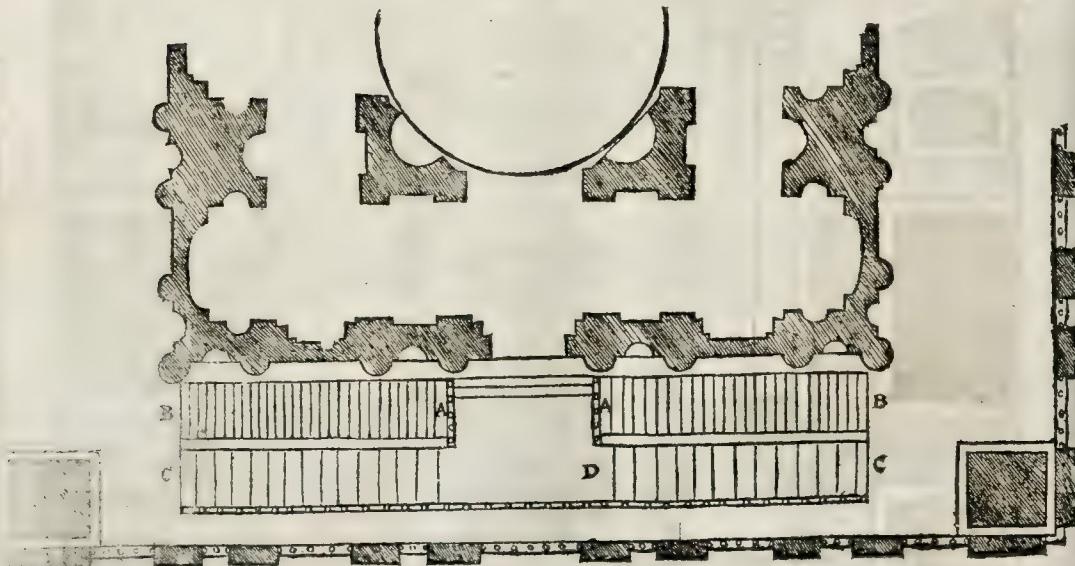
The fourth Booke.

The eyght Chapter. Fol. 54



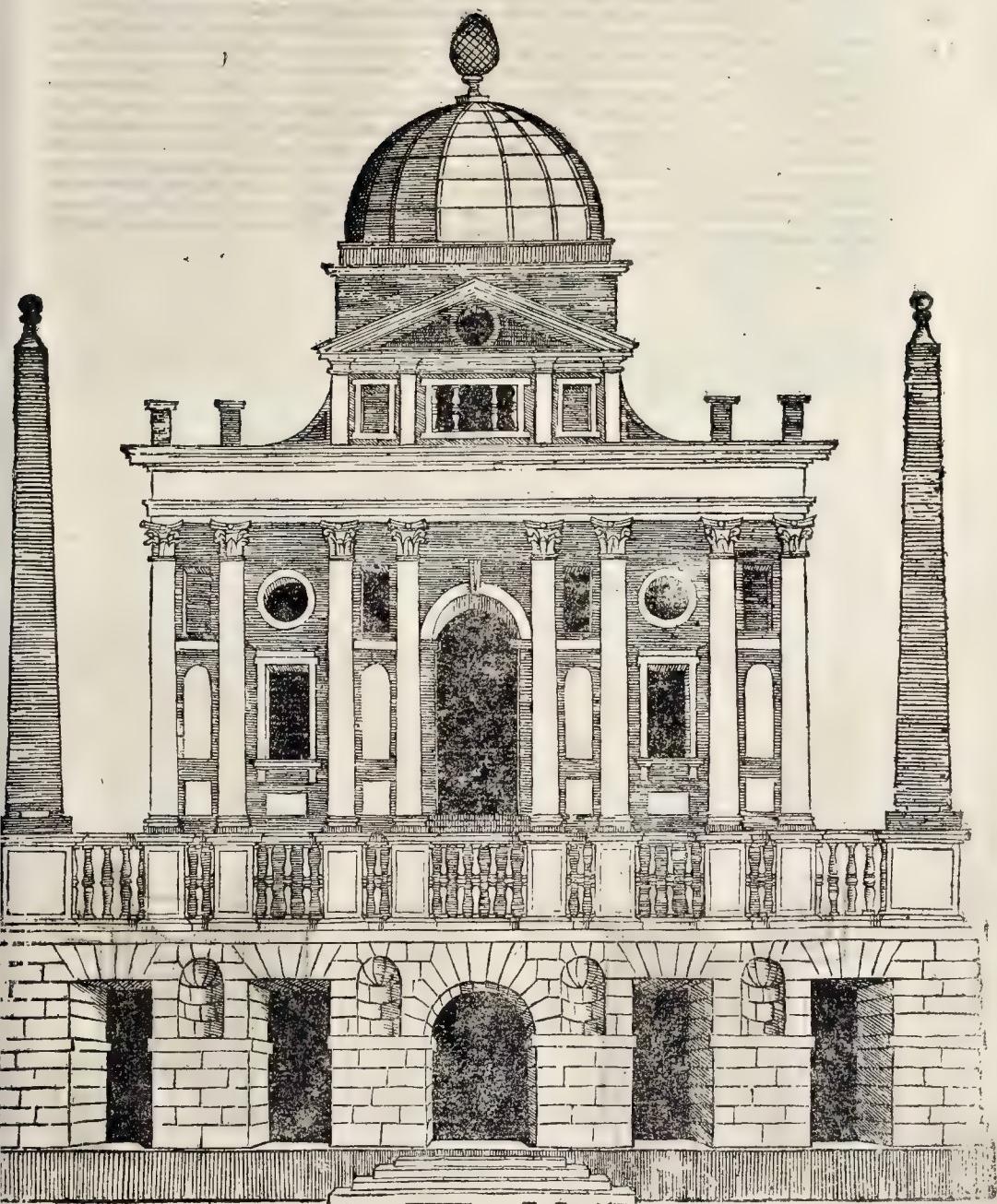
Of the Corinthia

Things that are made for common vse (although they are placed in all proportion and measure) are much commended; but not admired. But things that are not vied, if they were made for some causes, and well proportioned, shall not only bee commended of most men, but also wondered at. Therefore this building following, which representeth a Temple, shall first be made of strong rusticall manner, as you see, and of such height as the place and situation requireth; but it must not be higher then 2. mens length: On which flat vpon Pavement, a man shall goe vpon, beginning at the step A, standing within the entrie, and going vp to B, then it shall bee flat where the Temple shall have a broad walke, with a leaning round about. The whiche Temple shall bee elevated from the walking of Pavement, till you come above the height of the Podium, or leaning, 3. steps moxe: and to come to that, you must goe vpon the step C, to the flat D, which shalbe the height of the Podium, with another leaning, which shalbe higher then the lowest. And from this flat, to the Pavement of the Temple, he layd thre steps shalbe: the widenesse of this Face shall be divided in 24. parts, and one of these parts shalbe the thickenesse of the Columnne. The middlemost inter-Columnne shall have 4. parts: those that stand on the sides, where the windowes are, shalbe 3. parts: and where the Niches shall be, ther shall each of them haue a part and an halfe, so shall the 24. parts bee distributed. The same stellabato, as is to stand at the Podium, shall also bee made under the Columnne; of which Pedestall, the height without the Plinthus, shalbe 3. parts. The height of the Columnnes, with Bases and Capitals, shalbe of 3. parts and an halfe. The Plinthus, Frieze, and Cornice, shalbe a fourth part of the Columnne, as it is lapo of others: and the members also deuided in 4. parts, the widenesse of the Gate shalbe 3. parts, and the height 7. parts and an halfe, which is about 2. fourme foote and an halfe: and this is done, for that by reason of the distance, they seemed shorter to a mans sight, then they that were below. The widenesse of the windowes shalbe one part and an halfe; but the height shalbe more then 2. fourfesquares, because of the layd shorthening. The breadth of the Niches shalbe one part, and the height of 3. breadths, so the same reasoning as before that the Falsgum holdeth, halbe like the Pedestall in height, and the Cornice the fourth part of the layd shorthening: and the other, where the Bettell or Lanthorne riseth vp, is also of the same height, which shall be so much more convenient to roome, as the Picture shall cover the Corinice. On the 4. corners of the Temple, for the more beautifying, we may make 4. Pyramides: the height whereof (without the Stumen) shall be as the eyes are at the beginning of the Falsgum: and the Scima like the Falsgum: which Falsgum shalbe made by the like rules, as are spoken of before, of the Temple of Dozica. The parts under the Temple, shalbe for certayne Oatoies, called Confessionals, whereof shalbe seene many vnder the high Altar.



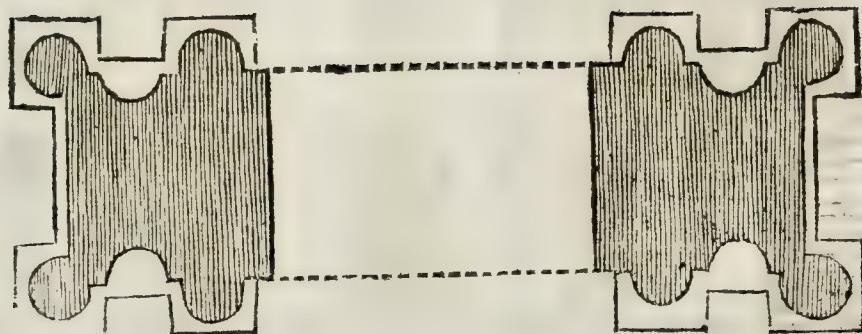
The fourth Booke.

The eyght Chapter. Fol. 55



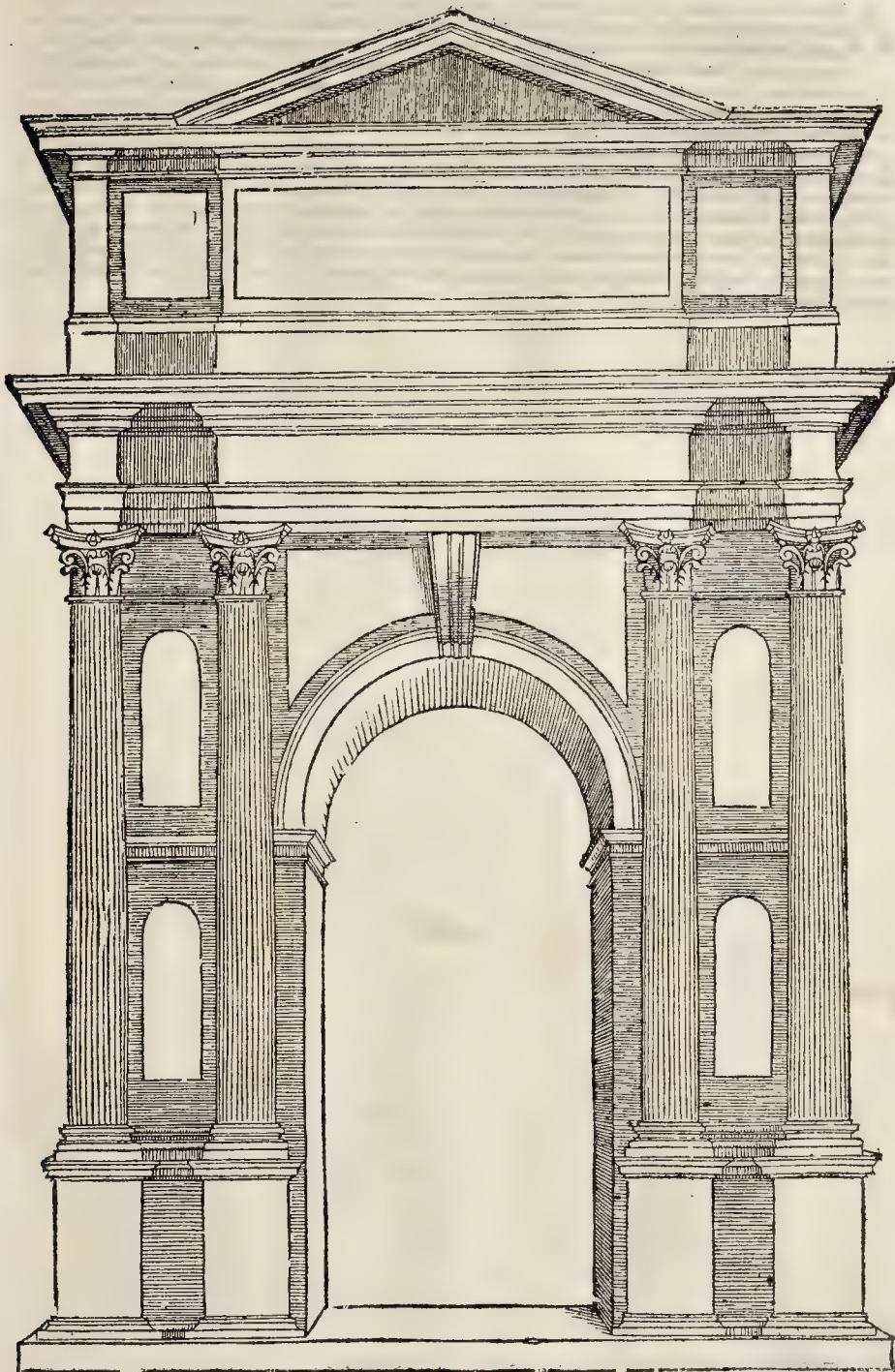
Of the Corinthia

ALthough in these our dayes, men make no Arches Triumphant of Marble or of other Stones, nevertheless, when they set in the fairest places of the Towne, they use to make Arches triumphant for to welcome him in, which make an Arch after the Corinthia maner, the proportion and measure shalbe, that the light shalbe of two foursquares, and one fift part: the thickenesse of the Columnes shall be the $\frac{1}{5}$ part of the widenesse of the doore or light: The height of the Pedestals shalbe of $\frac{1}{2}$ the Columnes thicke: and the height of the Columne shalbe of ten parts and an halfe. The Episilie, Sophsone, and Cornice, are together the fourth part of the height of the Columne: and so from under the Arch, to bader the Architrave, there shall hang a role of two Columnes thickenesse in height, and the lessening thereof under, shalbe drawne up to the Center of the Arch. Touching the particular members, as the Pedestal, Vale, Capitall, Architrave, Frise, and Cornice, you shall obserue the rule before set downe: the breadth of the Arch, with the Pilaster, shalbe halfe a Columne. The inter-Colomme must be of a Columne and an halfe. The Pilasters are a Columne broad, and the heighth thier, for a standing Image to be placed in them. The height of the second doore shalbe made thus: the Columne without Pedestal, shalbe set in the upper part in the Cornice in three parts, and one of these parts shalbe the height: but of that height there shalbe four parts made: one shalbe the Cornice aboue; the bounding wheresof, may be drawne out of the Chapter of Doore, altering the members. The height of the Vales stand elevated aboue the Cornice the thickenesse of a Columne belowe, and that is, for that the Projecture of the Cornice darketh the rest of the Wall's neitherward. The Cornices shall give out, as you see them in the Figure. The height of the Frigium shall be made by one of the rules set downe in the Doore. This present Figure doeth partly resemble the Arch at Ancora: but with great reverence, in regard of such a wozkeman, I have brought the measures into one generall rule, that every man may easily put such measure in use.



The fourth Booke.

The eyght Chapter. Fol. 58

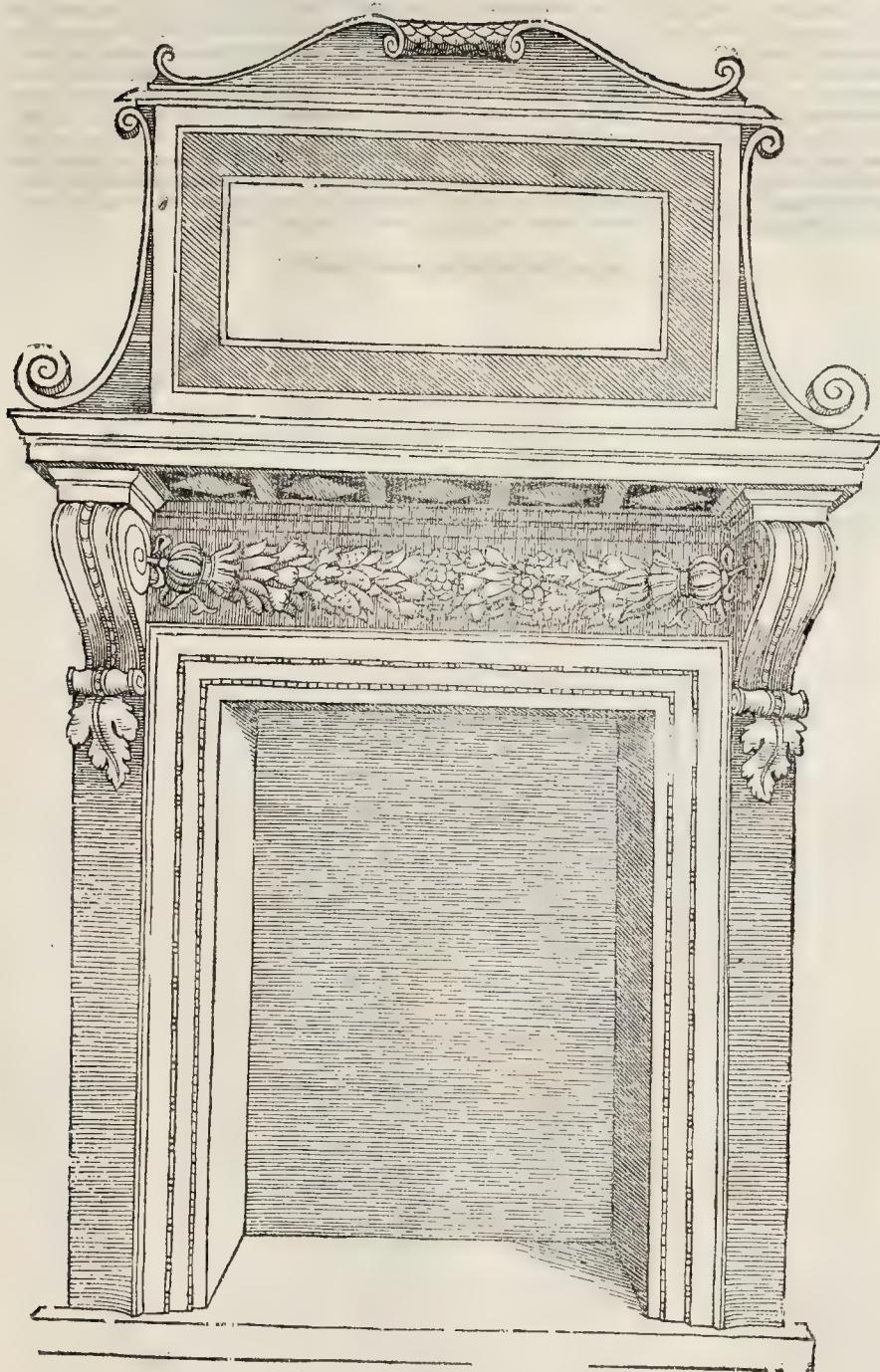


Of the Corinthia

As much as ned required, I have spoken of Corinthis; although a man might speake of divers kindes of ornaments; but it is needfull to speake of the ornament of a Chimney, because of the dagly use thereof, so that a man cannot bee without it: for not onely in great, but also in small Chambers men use to make fire, where, in such straight places, they set such Chimneys within the wall, whereto a man may make divers ornaments after the Corinthis manner. But if you make them in this forme, then the widenesse must be taken, according to the situation of the place: and the Pilaster shall be made of the first part of the widenesse; but of the eight part the woorke will be fowerly: the which Pilaster or Antepagmentum, together with the Supercilium, shall bee denuyded like the Architrave of the Corinthis. This Freake above, because it is grauen, shalbe made a fourth part greater then the Supercilium. The Cornice, together with the Capitals of the Buttles, shall hold as much as the Supercilium, and the same denides in thare as it is layd of the Cornice, in the Corinthis. The bredeth of the Pantiles, or Auncens (as we say) above, shalbe like the Pilaster, but beneath, whiche reacheth downe to the opening, they shalbe one fourth part smaller; and under them shalbe hanged two leanes, as you see in the Figure: which Projecture shall bee referred to the pleasure of the workman. To make or leave the ornament above, there consisteth not much therin: and this intent on thal serue not onely for a Chimney to beautifie it withall, but also for a doore, or other things, and the Frontispice theron will agree well with it, when you see it for a doore.

The fourth Booke.

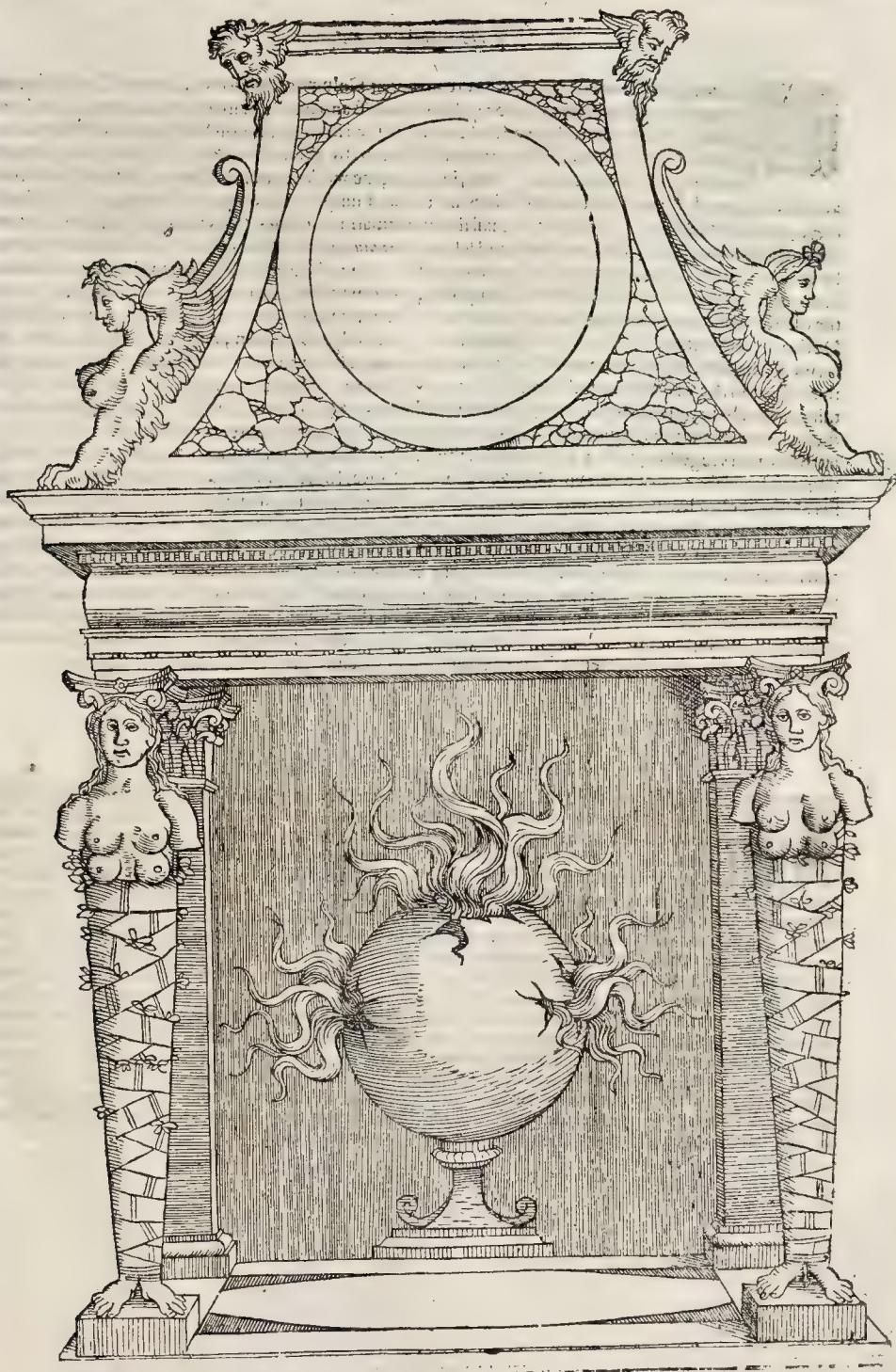
The eyght Chapter. Fol. 52.



Of the Corinthia

In a Hall or a great Chamber there is a great Chimney required, proportioned according to the distance, the which needeth a great conueriance; therefore if a man will make the Hodiglions sufficient for such a bearing out, hee must make two places on the floors: but in such a case (I mean) he should make two flat Columnes, and before them round Pillars, not close to the other, in such maner, that betweene them bath the place for the Columne must be, and in this maner you shall adorne them. As I layd in the beginning of this Chapter, the Corinthian maner had her beginning from a mayd, of the Towne of Corinthia: therefore I have placed a mayd here, in stead of a Columne: the heighth and bredth of the opening, being made according to the place, the heighth shall be denuded in nine parts, and one of shole parts shall be for the heads of the mayds, and the whole Figure being formed and swaddled, as you see: then the flat Columne or the Pillar shall be of the same proportion, obseruing the meature before set downe. Upon the Colonne, the Architrave, Freske and Cornice shall be set: whiche height, together, shall be the fourth part of a Columne lying, measured after the rule aforesayd, from the Cornice upwards, to the place; and the height thereof a man may adorne in this maner, as in the Figure: and who doubteth that this invention might not serue for a Dore, making iug a Columne against the wall, and specially before the Gate or Dore of a Court, or place of triumph, and such like?

The end of the Corinthia maner of building.



The maner of Composita Building, with the Ornaments thereof.

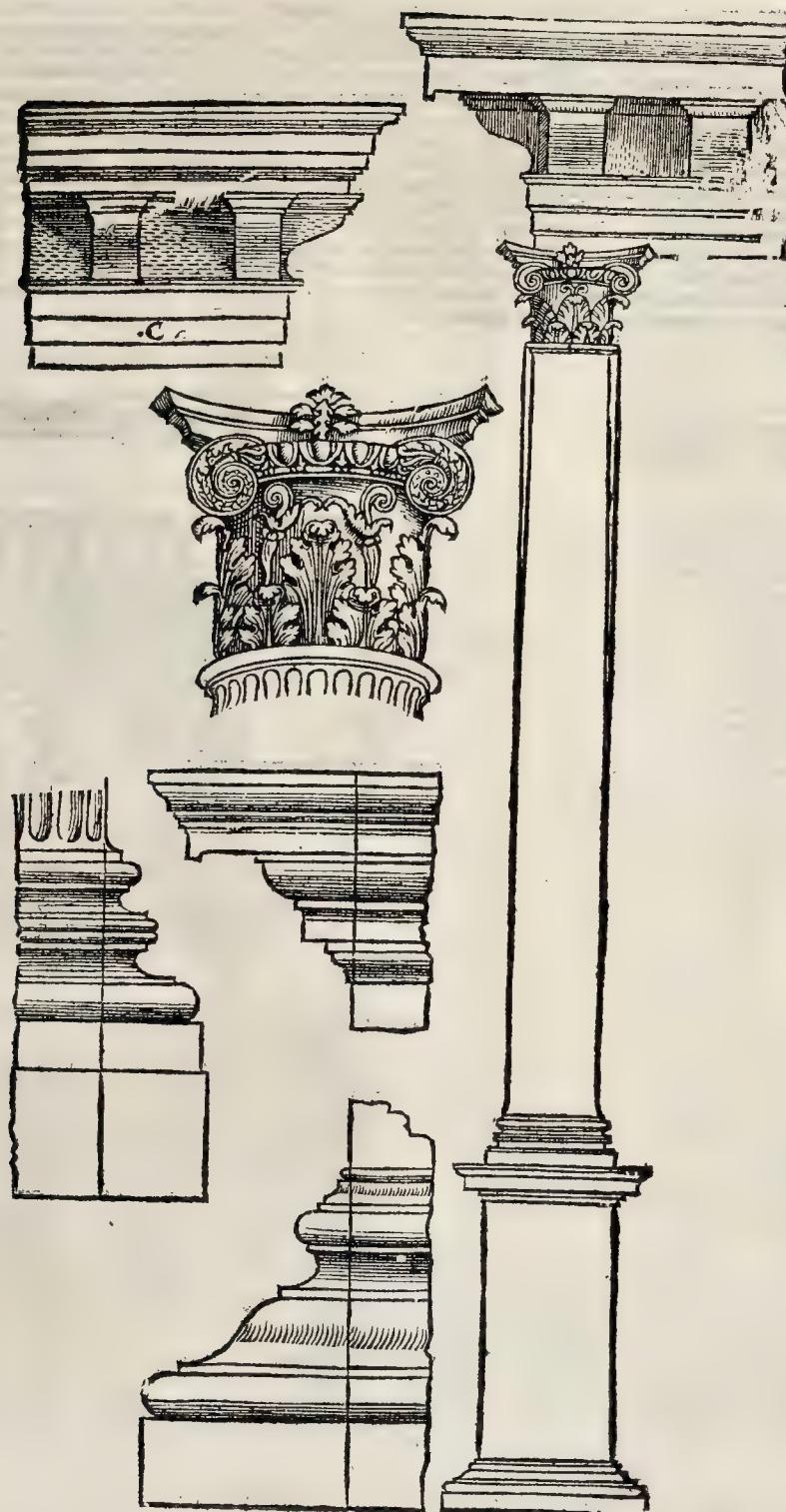
The ninth Chapter.

ALthough Vitruvius speaketh of foure maner of Columnes, as Dorica, Ionica, Corinthia and Thuscana, giuing hereby vnto vs almost the first and simple maner of ornaments of Architecture: neverthelesse, I haue added one to the sayd foure, as (almost) a fift maner of Pillar, composed of the others aforesayd, moued thereunto by the authorisite of Romane worke, which we may see with our eyes. And, in truthe, the workemans for sight ought to be such, that as occasion serueth, he may make many things by the sayd simple and compounde worke, respecting both the nature and the subiect. And therewithall the workeman sometimes (to whose judgement many subiects may be referred) shall be abandoned and left by Vitruvius counsel, that could not conceave all; whereby he shoulde be brought into a straight, and compelled to do, as he feeleth case: (I meane) for that Vitruvius, in my opinion, speakeþ not at all of this Composita, by some called, Latina, and by others, Italica; which the old Romanes, peraduenture, being not able to goe beyond the inuention of the Greekes, finders of the Dorica, after the example of men, and of the Ionica, resembled to women, and the Corinthia, after the forme of maydes, of the Ionica and Corinthia made a composition, piecing the Volute of the Ionica, with the Echino in the Capitall Corinthia; and these they vied more in Arches triumphant, then in any other things: which they did with good foresight, for that they tryumphed overall those countries, frō whence the sayd worke had their beginnings: and so they might well at their pleasures, as commanders ouer them, set these orders together, as they haue done in the great building of the Romish Coliseo. And hauing therein placed the 3. orders one vpon the other, viz. Dorica, Ionica and Corinthia, they placed Composita aboue them all, which, by every one, is called so: although, as men may perceyue, the Capitals are almost Corinthia. But it was an excellent judgement, in my opinion, of them, that hauing placed this order in the highest part of the Coliseo, which being farre off from mens sight, men should haue seene, if they had set the Architraue, Freese and Cornice of the Ionica and Corinthia aboue the Columnes, that such worke, by long distance of time, would haue prooued bad: but placing the Mutiles in the Freese, they made the worke rich, and it holpe the Projecture of the Corona; and withall, it wrought another effect, which was, that the Architraue, Freese, and Cornice, seemed to be one Cornice alone, by meanes of the Modiglions that were set in the Freese, for that they seemed great, obseruing their proportion.

CH height of this Columnne, Composita, shall, with Base and Capitall, be of 10. parts: The Base shall be of halfe the Columnne thicknesse; and it shall bee made Corinthia, with the measure set downe by the Corinthia: and this is set saue in the Gate of the Arch triumphant of Titus, and Vespasian, in Rome. You may make the Columnes chanelled, as you doe the Ionica, and sometime like the Corinthia, make the Volutes somewhat greater then the Caulicoli of Corinthia: which Capitall you see in the Arch aforesayd, and is set downe here in Figure: for the Architraue, Freese and Corona, if it stand farre from mens sight, then the Architraue shall bee as high as the Columnne is thick above the Freese, wherein the Putiles are, shall bee of the same height. The Cimatic of the Putiles shall be of a fift part: the Projecture of the Putiles, shall be like the height. The height of the Corona, with her Cimatic, holdeth as much as the Architraue, and that deuided in 2. parts, one shall bee the Corona, the other the Cimatic; the Projecture thereof, shall be like the height: and this is a common rule, although that in the Figure ensuing, marked C. you may see the members and measures of that, which is in the Coliseo aforesayd: and for that this Columnne is the slenderest of all others, therefore the Pedestall ought to bee someler then the rest, following the common rule: the height thereof shall be a double breadth, that is, flat, and of that height there shall be eight parts made, one for the Base, and one for the Scima: but of the particular members you may take the example here on the side, in the Figure; which, altogether, are proportioned according to the Pedestals of the aforesayd Arch triumphant: and so, being a Columne of ten parts, the Pedestall shall also be ten parts in it selfe, proportioned after the Columnne. And although men make all Pedestals in Perpendicular, yet in Athens, a most ancient towne, there are some, that are somewhat lessened in the upper part, which I discommend not.

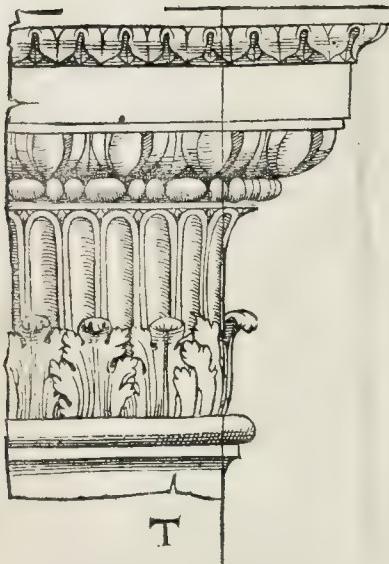
The fourth Booke.

The ninth Chapter. Fol. 59

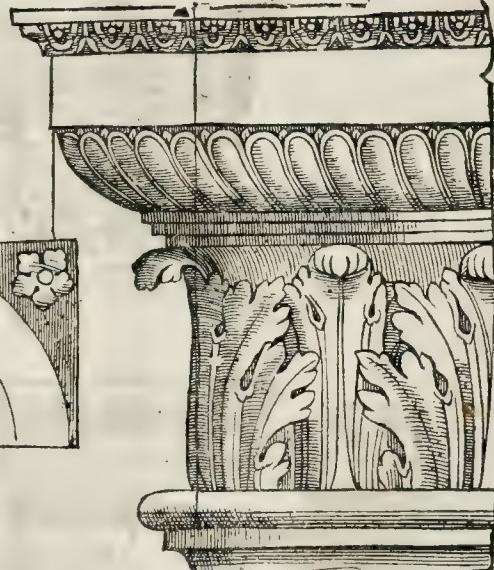
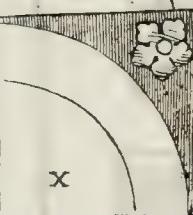
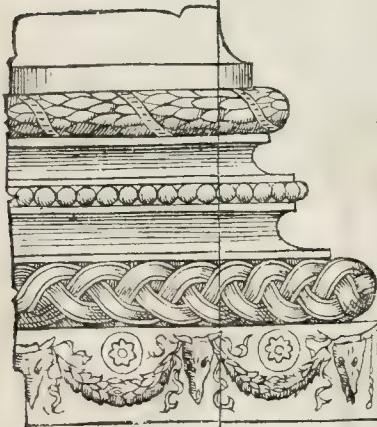


Of the Composita

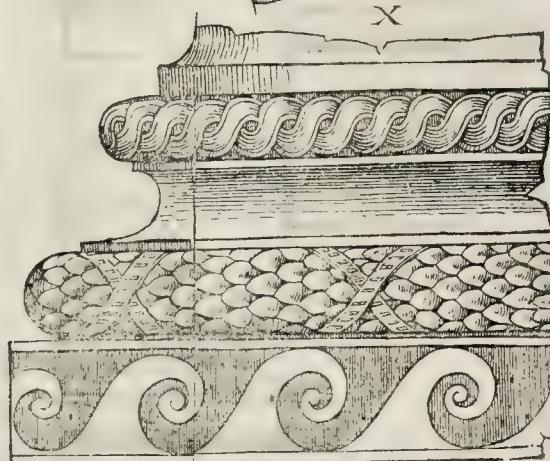
For that ancient workemen have used divers mixings of worke, therefore I will not set downe those that are best knowne and composed, so that the woxeman may chuse out of them such as he thinketh will serue his turne best. The Capitall hereunder set, marked T, is composed of Dorica, Ionica, and Corinthia: the Abacus and Cimatic is Dorica: the Echine and Strike, is Ionica: the Astragal and Leaves, are Corinthia, as also the Vale with the two Thorus, is Dorica: but by the 2. Scottis, and the Astragals, as also, because of the beautifullnesse thereof, it sheweth to be Corinthia; which things are in Triclinere in Rome: the Capitall X. and also the Vale, are of 2. kinds Dorica and Corinthia. The Abacus of the Capitall, and also the Vale, is Dorica; but the Vale by meane of the tuckynesse of the worke, may be named Corinthia, and so are the Leaves of the Capitall of Corinthia; but so, that the Abacus is square, and all the other members round: therefore you shall cut the Rose under the Abacus in the 4. corneres, as you see it in the Figure. The Capitall A. with the monstros houle, in place of Caulicles, may be called Composta, and is in the Basilico del foro transitorio. The strikes of the Columne are different from others, as you may see them beside the A. The Vale X. is Composta, and is in Rome: the Capitall is mere Corinthia, and is at the 3. Columns, beside the Colisse. The Capitall C. is composed of Ionica and Corinthia; and is in an Arch tryumphant in Verone. The Capitall D. is in the same Arch, on some flat Columnes. The Vale Y. is Composta, with the Astragals, which standeth vpon the uppermost Thorus, and is of Antiquite in Rome.

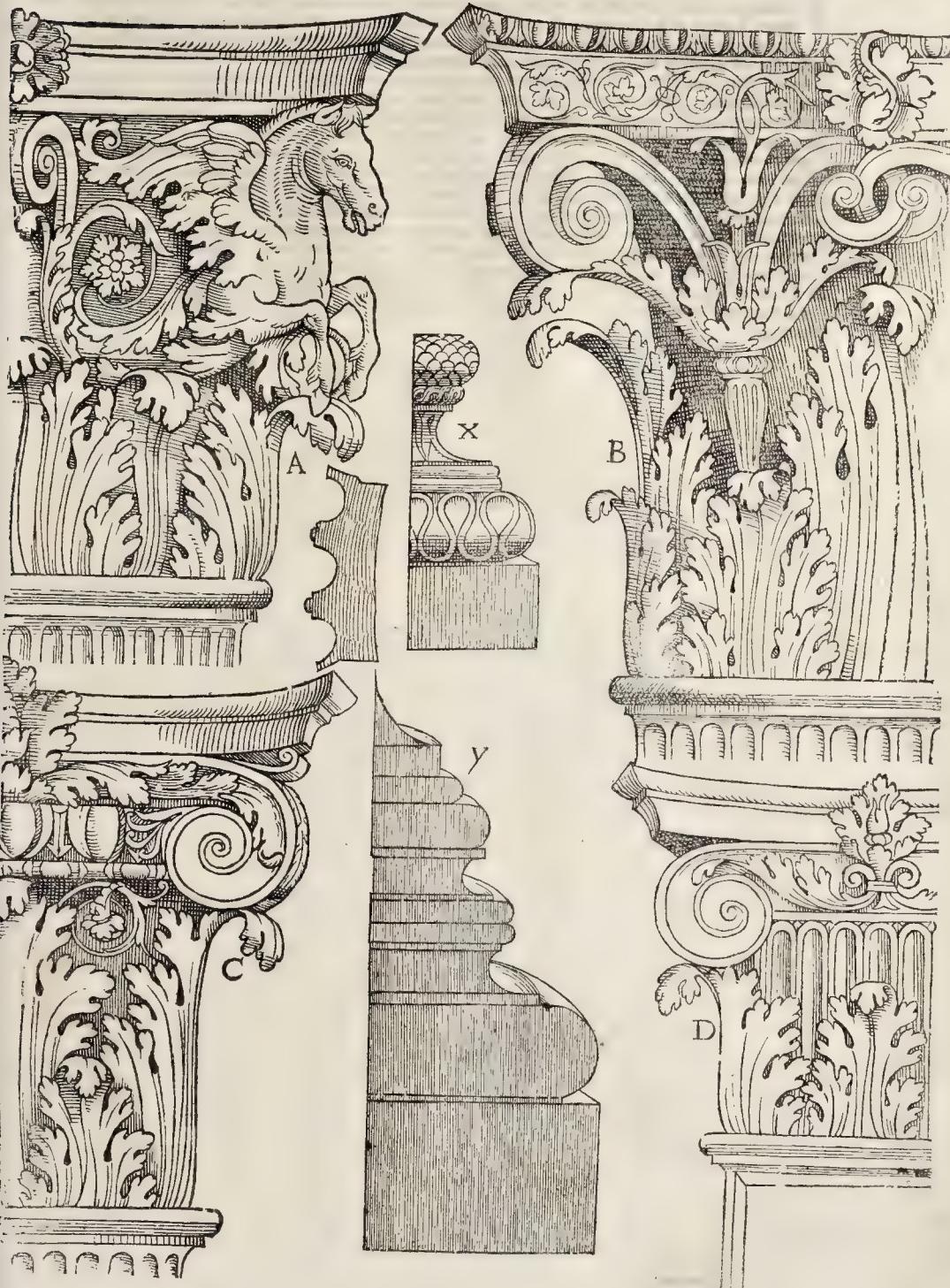


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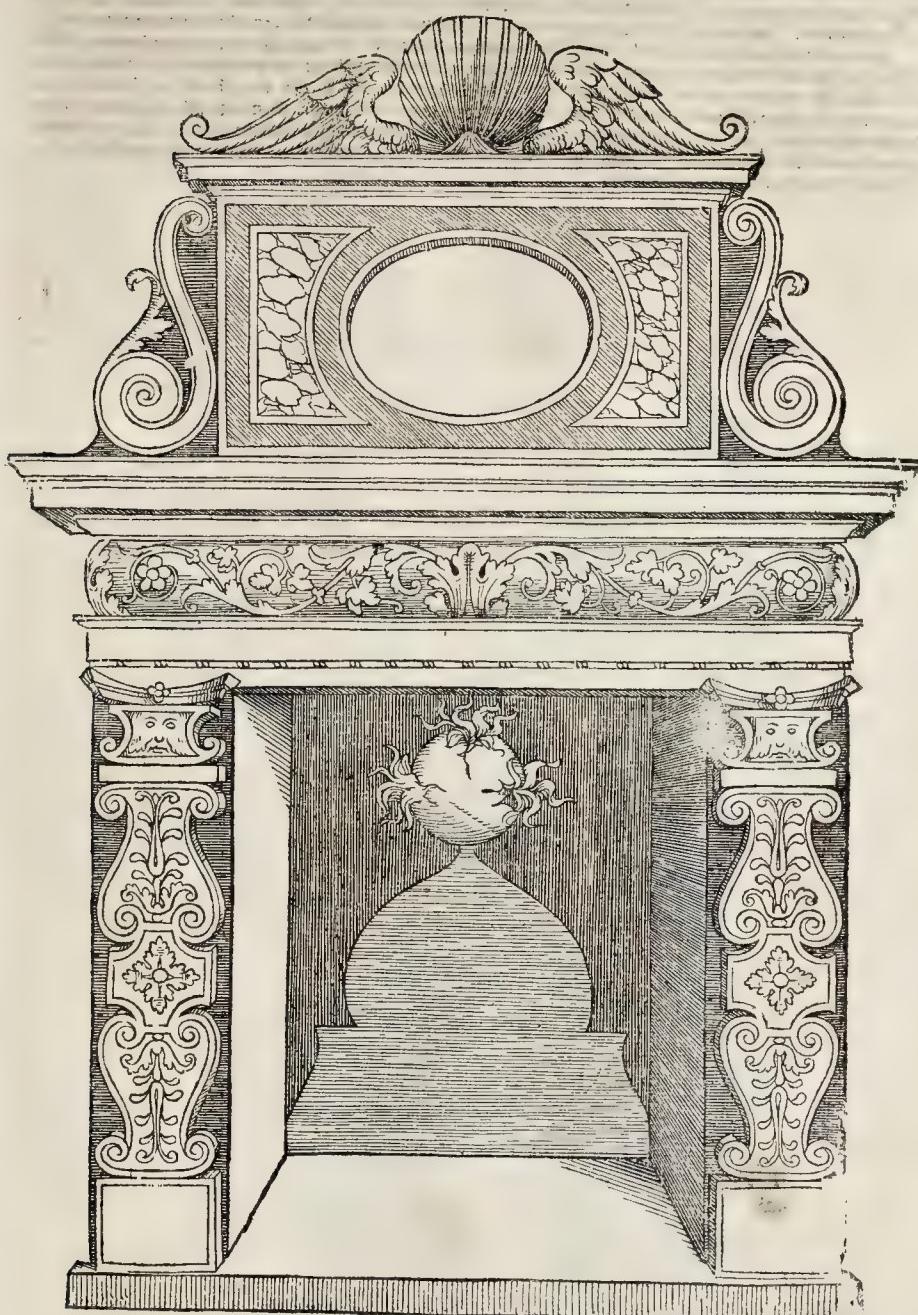


Of the Composita

YULKE not many Arches tryumphant made of Composita, and the most part are made of pieces, taken out of other buildings: neuerthelesse, having shewed a generall rule for them; therefore I will not set downe any other inuen^tion of Cisticles of that kinde: for the prouident woxkeman, as necessarie requireth, may helpe himselfe with the inuen^tions aforesayd, changing them into Composita. But I will shew two orders of Chimneys of each sort of worke; the one within the wall, & the other without. This Chimney, which shoulde stand cleane within the wall, if you will make it in a small place, the heighth shalbe no higher then to a mans shoulders, that a mans eye and sight may not be hurt by the fire: and the indencesse shalbe according to the bignesse of the place wherein it shoulde bee set. The height by to the Architrave, shalbe deuided in 4. parts, one shalbe the b^eoth of the Antepagmentum or the Pilaster, wrought in such maner as you se it heere set downe. And in this Composita, (because it is frerer then the other) I haue made this Pilaster very much differing from the rest, neuerthelesse, taking a part of this inuen^tion from an ancient stoele, which is at S. John de Lateranes in Rome. The Architrave shalbe of halfe the b^eoth of the Pilasters: the Cimatic of the first part: the rest shalbe deuided in 7. wheresof 3. parts shalbe for the first Facie, and 4. for the secynd. The Astragalus shalbe made of a halfe part, taken betwene both the Facies. The Frieze, because it is cur, shalbe made the fourth part higher then the Architrave: the Cornice is the heighth of the Architrave, and there shalbe 7. parts made of it: 2. for the Cimatic under the Cozona: other 2. for the Cozona: and one for the Cimatic there of. The 2. that remayne, are for the Scima; and the Projecture of all shalbe like the height. But if you make the Pilaster of the first part of his height, and the other members diminished accordingly, it will be much more sauely, and specially, if the worke bee of small forme. For the ornaments above the Cornice, you may chyse whether you will make them of not; that is referred to the woxkeman.

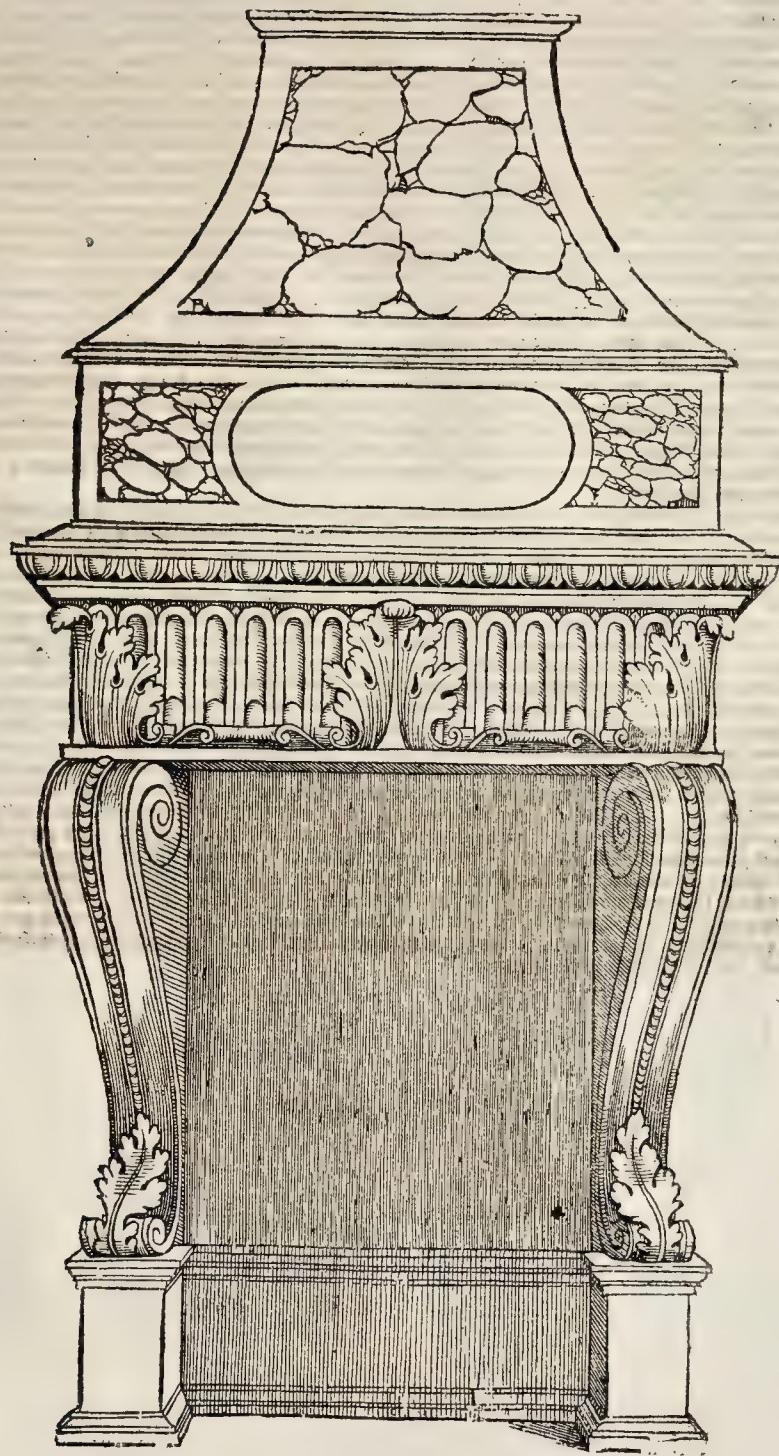
The fourth Booke.

The ninth Chapter. Fol. 61



Of the Composita

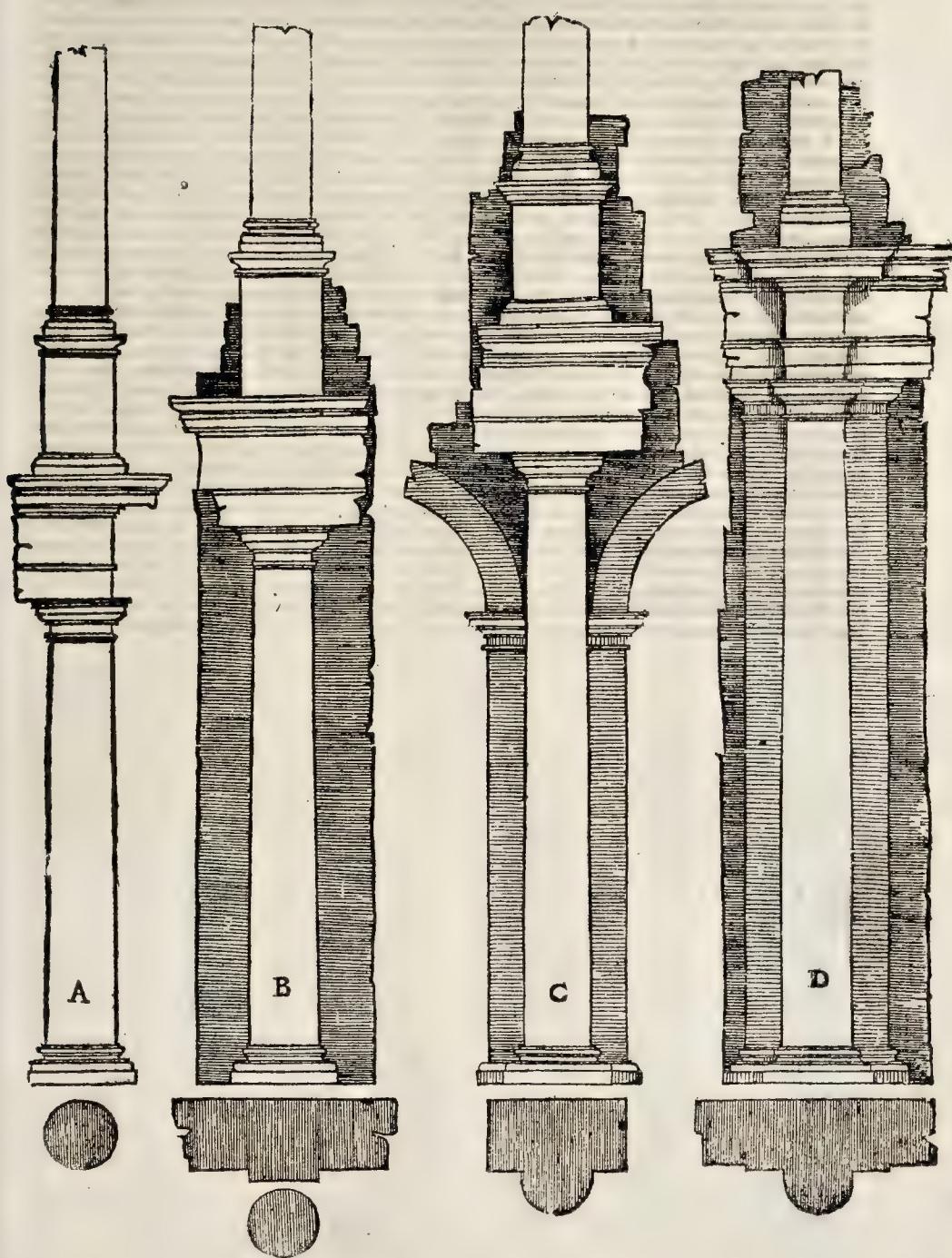
AMan may make other ornaments of Chimneys of this Composita worke, & in divers forme as this, because it is more licentious then the other maner of building: and so a changing of the other forme, you may also make this by this rule. The height of the Architrave being of a reasonable mans stature, you shall deuide the same in 8. parts, wheredof one halbe for the breadth of the Pedestals or Bollers: Vitruvius calleth them Prothyrides. The height of the Pedestals shalbe as high as if they were to st upon. The order above the Pediglions, which holdeth no ruse at all, shalbe two parts and an halfe of the breadth of the Pediglions. And so that also I have sayd, this maner is without rule, therfore the leaves and other parts, shalbe referred to the workeman. Men may also sometimes set the Dorica and the Ionica, and sometimes the Corinthian above the Pediglions: and so that the funnell, which receyveth the fume, is wode, therfore you may make the small order above it, which will give it a fayrer forme then the usuall, whiche goeth like a Piramides, as sharpe vp.



Of four maner of Simmetries.

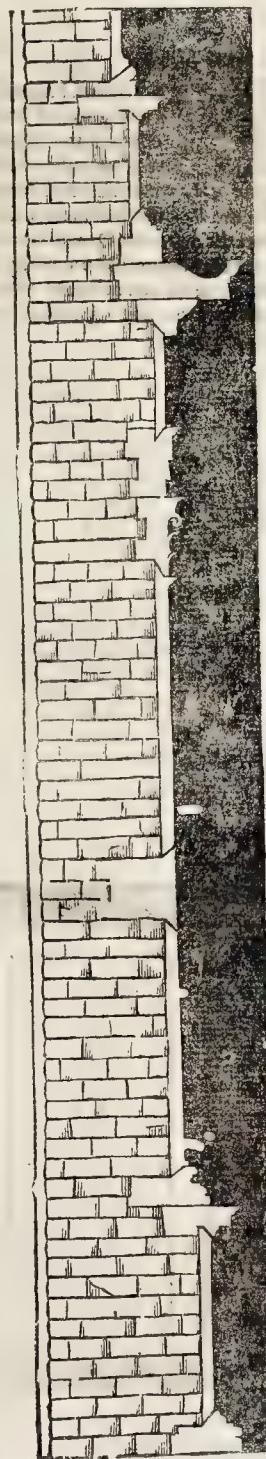
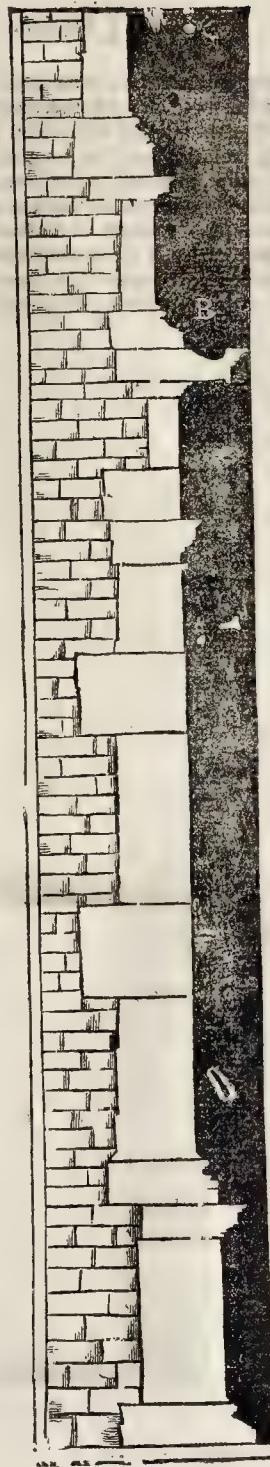
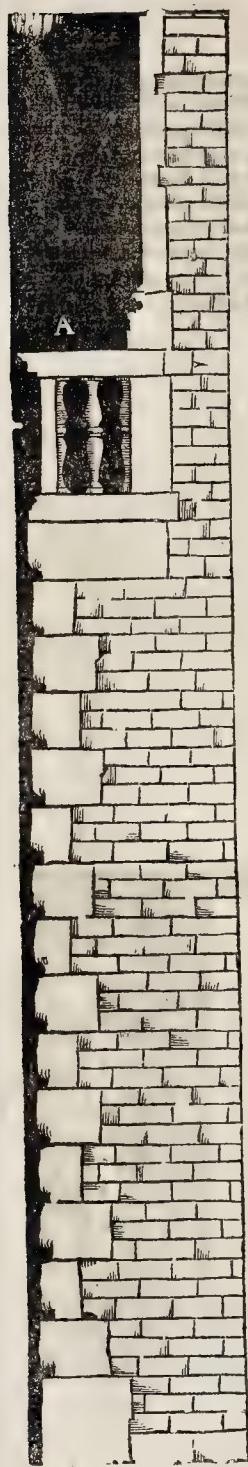
The Wozenan is to have a great iudgement, because of the diversitie of composition in Ornamentis of buildings, so that there are some places in Architecture, of the which there may, almost, certayne rules be ginen, for they are no accidents that happen contrary to our opinions, for every day we see some Columnes, that with their diuersitie positions, shew different measures in themselves, according to the places where they stand. These alterations are so made in buildings in 4. wayes, that is, setting the Columnes almost in an Isle, without any companion to helpe it either on the sides or behind. These certaynely beare a great waight, and in their heighth they goe not above the aforesaid rule: the example hereof is in the first Columne marked A. but if you place them against the wall (though they bee round) by the which being underhelden and holpen, a man may make another thicknesse higher above the same: the example thereof is in the Columne B. Or; also drawing alone two third parts from the wall, there may yet a thicknesse of wall go higher then the other, for that you see the like in some buildings, that rise to nine thicker & a halfe, and most in the Coliseo of Rome, in the Order of Dorica, as it is shewed in the 3. Columne C. but they are more holpen when they haue Pilasters on the sides, which bearing all the waight, gine the wozeman meanes to make the Columnes more slender, and so slender, that they may be layd rather to be placed there to fill a rame for beautifying, then for strength. You may also draw a Columne three third parts out of the wall, and on each side set halfe a Pillar, which will helpe the Columnes so well, that you may make another thicknesse above: and in this case, the Architrave, Frise and Cornice may beare one vpon the round Columne, yea although it were flat, because the halfe Pillars would helpe the Architrave, &c. on the sides: but vpon one Columne alone, it is vicious to make such worke bearing out, for the other parts besides should be abandoned without any helpe. This example you see in the Columne D. But when the Columnes haue dry waight to beare by, without the helpe of another, and shall haue sixt Intercolumnes, it shall not be thought meete to excede order, yea, although they haue Storys vpon Storys to beare vp: it is reason that they should be made better, that the worke may be more durable: and although the Pedestall be a great helpe to rase vp Columnes, nevertheless, if the Columnes be high enough, I would thinke it better if the Columnes had them not, specially in the lowest Storys, but in the third and fourth Storys with reason. Podiums and Pedestals also serue to rase vp Columnes, which the old Romanes obserued in Theaters and Amphitheaters.

But touching the setting of Columne vpon Columne, there are divers reasons: The first is, that the Projecture of the Pedestals of the Columnes placed above, should go no further out, then the thicknesse of the vndermost Columne, and this should be a most certayne reason: but for that the second Storys should lessen much from the first, and would serue no moe for any other Storys, conseruing the great lessening ensuing, another reason, and moe to the purpose, is this: That the flat of the Pedestall ought, at least, to be in Perpendicular with the Column below, and to let the Columne above this Pedestall, lessened a fourth part from that which standeth vnder, as well in thicknesse as in height: so this rule agreeth with that of Vitruvius in Theatrum: which figure is above the Columne A. and if you will not lessen the Columne so much, then you must make the uppermost Columne as thicke as the nethermost is in the uppemost part: but in this case, the flat or mally part of the Pedestall would be broader then the nethermost Columne is thicke below: nevertheless, those of the Theater of Marcellus worke that effect. The example hereof is in the Columne B. and these thre reasons are probable enough. But the ancient Romanes, in the great Ordinace of the Coliseo, made the Columne Ionica, Corinthia and Composta all of one thicknesse; and the Dorica, vnder all the other, they made thicker, about the twentieth part. And this (in my opinion) they did by god aduise: so if they had lessened all the Columnes the fourth part, one above the other, the last, in so great a building, by reason of the great distance, would haue shewed very small, which we now see to be of god correspondence, by reason of the height. The shewing of this is in the Columne C. And as the Columne above the Columne D. is lese then that which standeth lowest one fourth part: for that, if a man hath a reasonable houle to make of 3. Storys, so I would not thinke it amisse, that a man should lessen every Storie the fourth part, according to Vitruvius aduise: but if the building be high, then you were better obserue the Order of the Coliseo, that the Storys Dorica, Ionica and Corinthia, may each bee about one height, but the Storie above increaseth in height about the fist part: and this is so (as I haue sayd) because of the great distance: which part, by meane of the great distance, serues to be of the height that the rest are: and although that the shewing of these Columnes is Doricall, yet it is so in all sorte of Columnes.



Of Brinke.

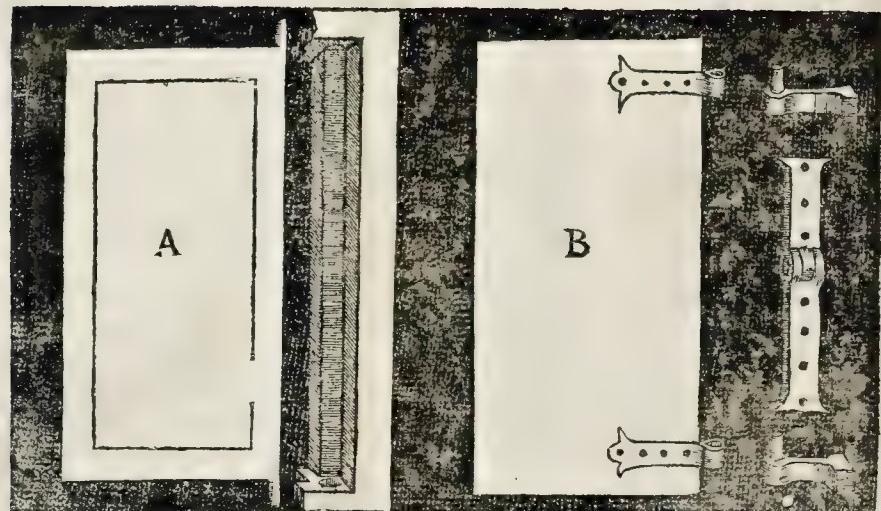
Hauing spoken of so many and divers Ognaments of stonnes, it is requisite, that I shold also shew how they are to be placed in wroke; and specially, when a man is to mix hard stonnes & bricks together, which requireth great diligence and Arte: for that bricks are like flesh in a piece of wroke, and hard stonnes like the bernes to knit and hold them together: whiche two things, if they be not well and fassly bound together, they will, in time, decay: and therefore the foundation being made in such maner as the place affordeth, it is requisite, that the prouident wrokeman shold make ready all the hard stonnes, and also the bricks, with the rest of the stoffe belonging therunto, and so shold come to lay and ioyne the hard stonnes and the bricks together, all at one time: and it is requisite, that the hard stonnes shold be set so farrre within the wall, that although there were no moister to hold them together, yet they shold, of themselves, stand fast in the wall: whiche doing, the wroke will be strong and continue hard. The example hereof is shewn in the other side, by the figure A, where it is also shewed, how a man may make places brethhigh, without feare. And if you haue pedestals with Columnes to set upon them, where hard and soft stonnes are mixed together, if the hard stonnes be not well ioyned with the soft, as you see in the figure B, the wroke will not continue long. And if the Columnes be of divers paces, some of them (that is the least) shall goe depe into the wall, to hold the other the fatter. But if the Columnes bee of one pace, then they would stand, at least, a third part within the wall, but the Bases and Capitalis must enter much more into the wall, and above all the Cazona and other Cornices, whiche bearre farrer out from the wall. The innermost part that is unwright, must counteruayle that whiche is without, that it may bearre it selfe: but if at the same time a man will make any wroke or Facie vpon the stonnes, then it is requisite, that the wrokeman, before he begins to lay any wroke aboue the ground, shold make ready all his stonnes, together with the other stoffe belonging therunto: and so laying and knitting the stonnes with the bricks together, I say, that he shall doe well to set some of the stonnes so depe into the wall, that they may hold the other pieces together by force, ioyning well in, as you see it in the figure C. that in time they may not rye and breake aboue one from the other. But that the wall, made of bricke, shold not sinke, and finking, shold breake the thinness parts, by reason of the waight above, it is necessary to haue bricke well burnt, and morter well tempered, & betwene the stonnes little morter, & wel layed and ioyned one vpon the other. And above all, such works would not be made by any force, nor waight vpon waight to be packt in halle, but you must let it rest somewhat from lay to lay: for if a man wil wroke in halle, and set great waight vpon it, it is most certayne, the wall will崩e, and the stonnes being not able to bearre the waight, will breake; but if it be made with lesser, then the waift will be as it shold be: nevertheless, I would alwayes more commend the wroke that is wholy bound in the wall, then that whiche is ioyned together or couered; and specially, in my opinion, men shoulde not make them in walles that stand outward, for that the houses which haue bene made so in somer time, by ancient wrokemen, and were covered over with Marble and other fine stonnes, are now sene all without stonnes besyze, and nothing but the wall of bricke, that God behinde them, standeth still: but those buildings, where the hard stonnes are bound and ioyned into, and with the bricks, are yet standynge: nevertheless, if you will make such wroke simple, I think this the surest way, although some wrokemen, in divers places of Italy, haue made some building, with simple walles, leauing places in them for hard stonnes to be put in, and after, at another time, haue put in such Ognaments: nevertheless, for that such things are not well fastened in the wall, but in a maner hacht, you may in many places se the pieces falne, and euery day more and more decay.



Of Doores of Wood, and of Metall.

The tenth Chapter.

AS I thinke, I haue sufficiently spoken of the Ornamentis belonging to building of Stone, now I will speake of Doores that shut the houses: whether they be of Wood or Metall, I will set downe some Figures thereof: of the hookes I will say nothing, for all the world knowes them well enough: neuerthelesse, those that were vsed in ancient time, as you see them in the Figure **A.** were easilier to be opened and shut, then those which are now vsed in all Countries, as in the Figure **B.** But whether these Doores are of Wood or Metall, their Ornamentis shalbe made in such maner, that the fayrer the Ornamentis of Stone are, the Ornament of the Gate also shall bee correspondent, that they may be one like the other; and to the contrary, if the Ornament bee slender, then you shall make the Doore of Wood or Metall thereafter, which is to be referred to the workeman: and to give you a shew of such Ornamentis, you shall here see five maners of Ornamentis, which, for the most part, are taken out of Antiquities.



The fourth Booke,

The tenth Chapter. Fol. 65



Of the Frames of Doores.

If men make Doores, Gates, or Leaves (as we terme them) all of one piece, so that there needeth in that case neither wood nor iron unto them, they make the hokes of the same piece of Metal. But those that are made of wood, and then couered over with Copper of reasonable thicknes, which, if it bee of flat plates, you must fassen one vpon the other, and yet, although they be well ioyned & bind, or nayled together, nevertheless, the nature of wood is such, that it will shrinke or swell, as the time of the yeare is drie or wroght: if therefore you will make such a doore, that shall be couered over with Copper, Iron, or any Metal, you see the surest way here in the tide, in the figures A. and B. for wood never war eth longer, but remayneth still in the same forme; which is referred to the woodeman, to make them thicke or thinne, as hee will, according to the booke that they shall beare, and you may also fill the spaces of the same wood. And for that all the ancient doores or goings through, are commonly foursquare, onely those of gates of Townes, or triumphant Arches, which are roost: nevertheless, in our dayes many doores are made round about, peraduentors for more strength; and also, for that in some cases they become the houses well, whereof I haue shewed a figure, and for that, in truthe, a man cannot conceane all things: for many accidents happen to a woodeman at such tyme when he is to deuise some new woake.



Of Ornaments of Pictures within and without the houes.

The eleuenth Chapter.



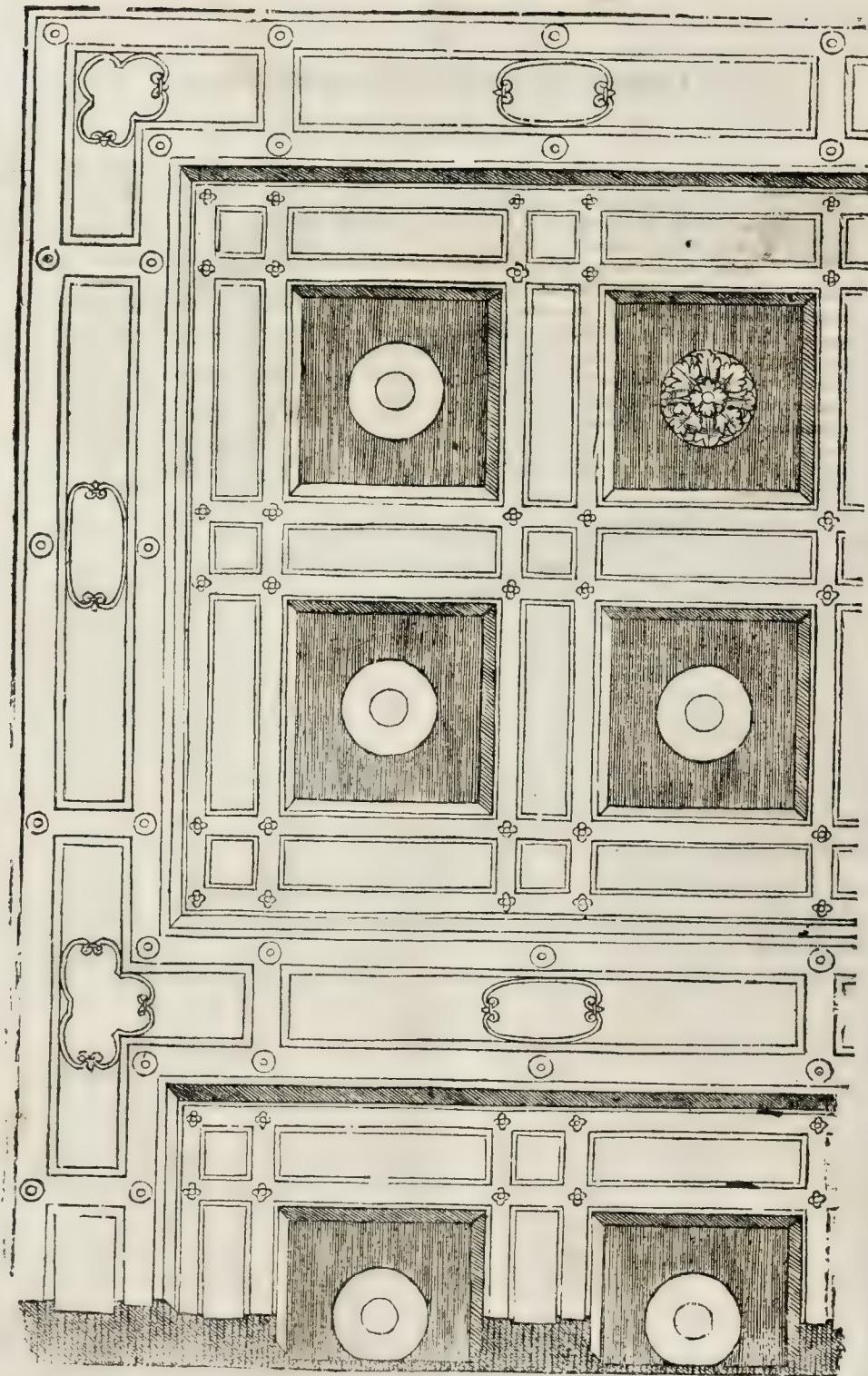
Hat I may not leave out any kinds of Ornaments, whereof I give not some rule for instruction, as well in Pictures as other things, I say, that the workeman ought not only to take care of the Ornaments of stone or marble, but also of the Paynters worke, to set out the walles withall: and it is requisite, that he should prescribe an order therein, as Surveyor of all the worke: for this cause, that some Paynters have beene workmen good enough, touching the handling of their worke, but for the rest, of so little vnderstanding, that desiring to shew their skill in the placing of the colours, haue disgraced, and sometime spoyled a Story of a house, for want of consideration how to place the Pictures in the same. Therefore if they haue a Forefront or Faie of a house to paynt, it is certayne, there is no openesse to be left, where ayre or lantshap is to be made, for thof breake the building; and of a thing that is mally and close, they transforme it into an open weake forme, like a rounous and vperfit building. Also therell should be no personages nor beasts coloured, vniuersall were to trim and decke doores, wherein there are mens portraies: but if the owner of the houfe, or the Paynter, desire colours, that the worke may not be broken nor spoyled, a man may couer a hacked wall over with cloth, and therin paynt what he will: and also, after the manner of tryumphs, a man may hang on the wall Garlands, and strings of Leaues, and Fruits, Flowers, &c. and also Shields, Trophees, and such things as are to be sturd: but if you will paynt the walles with firme matter, then you may fayne things of marble or other stones, cutting therein what you will: you may also beautifie some figures in Niches, with metall, and so the worke will remayne firme, & worthy commendation of all those that know good worke from bad. And the Author recharfeth divers excellent workemen, whome (for breuitie sake) I will omit, that onely vised to paynt nothing else but white and blacke in houses, and yet so excellently well, that it made men wonder to behold them. A man may also, with good reason, make and set forth certayne openings in walles of lodgings, round about the Courts, and make ayre, lantshaps, houes, figures, beasts, and such like things; as hee will in colours. Also, if a man hath Chambers, Halles, or other places, about the ground within, to paynt and set forth, then a Paynter, in maner of Architecture, may make openings to see through them, as the place is: for aboue the sight a man must make nothing but ayre or skyes, roofes, high hillies, and the vpper part of houes: and if you place figures also aboue the sight, a man must see vnder them, and not the ground whereon they stand. And if the Paynter will make a Hall or any other, or further roome perspective, he may, ouerthe going in, with order of Architecture, make it to shew further then in effect it is. And this, *Balshazzar* (a man excellently well learned in Architecture) did, in beautifying the Hall of *Auguſtin Guyse*, a Merchant of Rome, where, in that fort he set out some Columnes, and other Architecture to that purpose: so that *Peter Aretein*, a man also skilfull in Paynting and in Poesie, layd, that there had not beeene a perferit Paynter then he in that houſe, althoſt there was worke also in it of *Raphael* owne doing. And when the walles are paynted, and if you will haue the rooſe also done, then follow the ſteps of Antiquitie, making things that are called Grootes, which, for that you may make them as you will, ſhew well therein, as Leaues, Flowers, Beasts, Birds, and other mixed matter. If a man maketh any clothes or apparell of figures, or which are made fast on them, therin a man may doe as he will. But if a Paynter will make any figures according to the life, in a rooſe of a houſe, then he must be very ſkilfull, and much exercized in Perspective worke, and very judicious to chufe ſuch things as are fitte for the place, and rather heavenly flying things, then earthly things, with ſuch arte, that he must ſhorten the figures ſo (although they bee monſtrous) that when men ſtand a conuenient diſtance off from them, they may reſemble the life. Which thing is excellently well made in *Loretto Mantua*, and other places in Italy, by diuers workemen: yet ſkilfull workemen in our time haue ſhunned ſuch ſhortening, for that (in truthe) it is not to pleafe to the eyes of the common people. Therefore *Raphael Durbin*, whom I will alwayes name Divine, for that he never had his fellow, (I ſay no moe) in this thing, as mea iudged of him when he was to paynt the rooſe of *Auguſtin Guye* his Gallery, ſhunned ſhortening as much as he could: for when he came to the highelt part of the rooſe, and there meant to make the banquet of the gods, heavenly things, and ſuch as ſerved to the purpose for a rooſe, taking away the harshneſſe of ſhortenings, ſet forth a cloth of azurē colour, made fast to the Ringers or Garlands, as if it had beeene a thing to bee ſtird, and therin made the banquet ſo ſeemely and ſo workemanlike, that the Gallery was rather eſteemed for a preparation to a tryumph, then a playne paynting made vpon a wall. Therefore the workeman, that ought not to be vnskilfull in Perspective worke, ſhould not indure, as being Surveyor ouer all the workemen in the building, that any thing ſhould bee made therein, without his counſell and aduice.

Of flat Roofes, and the Ornaments thereof.

The twelfth Chapter.

ALthough in the Netberlands they use not to decke the Chambers in the Rooffes with wooden worke, nevertheless, when a house without is made wholly after the old maner, it were unfit that the Roofe shold not be agreeable, as also the Bedsteeds, Bankes, &c. And which is more, I would say, that each place shold be stufed and futed within, with things fitting to that whiche it sheweth outward. I say then, If the Roofe be high, then the devissons to be wide of space, and rising or bearing out well: and if a man will beautifie it with Paynting, it must bee well done, and conformably paynted, according to the greatnessse and distance thereof. It ought also to be made of light and browne colours: and in the middle of the field you must set a gyld Rose: but if a man will colour it, then the field must be bluse, as piercing, but the Roscs must be bound with some worke or branches, that they may not seeme to hang in the ayre: and the Cornices which close up the four esquare or other fields, must bee well gyld, or beautified with the same colour: but if so bee the Roofe is not high enough, then you must make the worke thinner and smaller, as also the paynting: and that you may understand it, I haue set two figures to bew you, which, notwithstanding, are all one: the one of bare wood, the other paynted, as I sayd before. And this Order I obserued in the Roofe of the great Librarie in the Palace of Venice, in the time of the Prince Andreagritti, because the Roofe was lower then it shold be, in respect of the widenesse and lengtb of the Hall, and I made it of thinne worke, for the reason aforesayd.

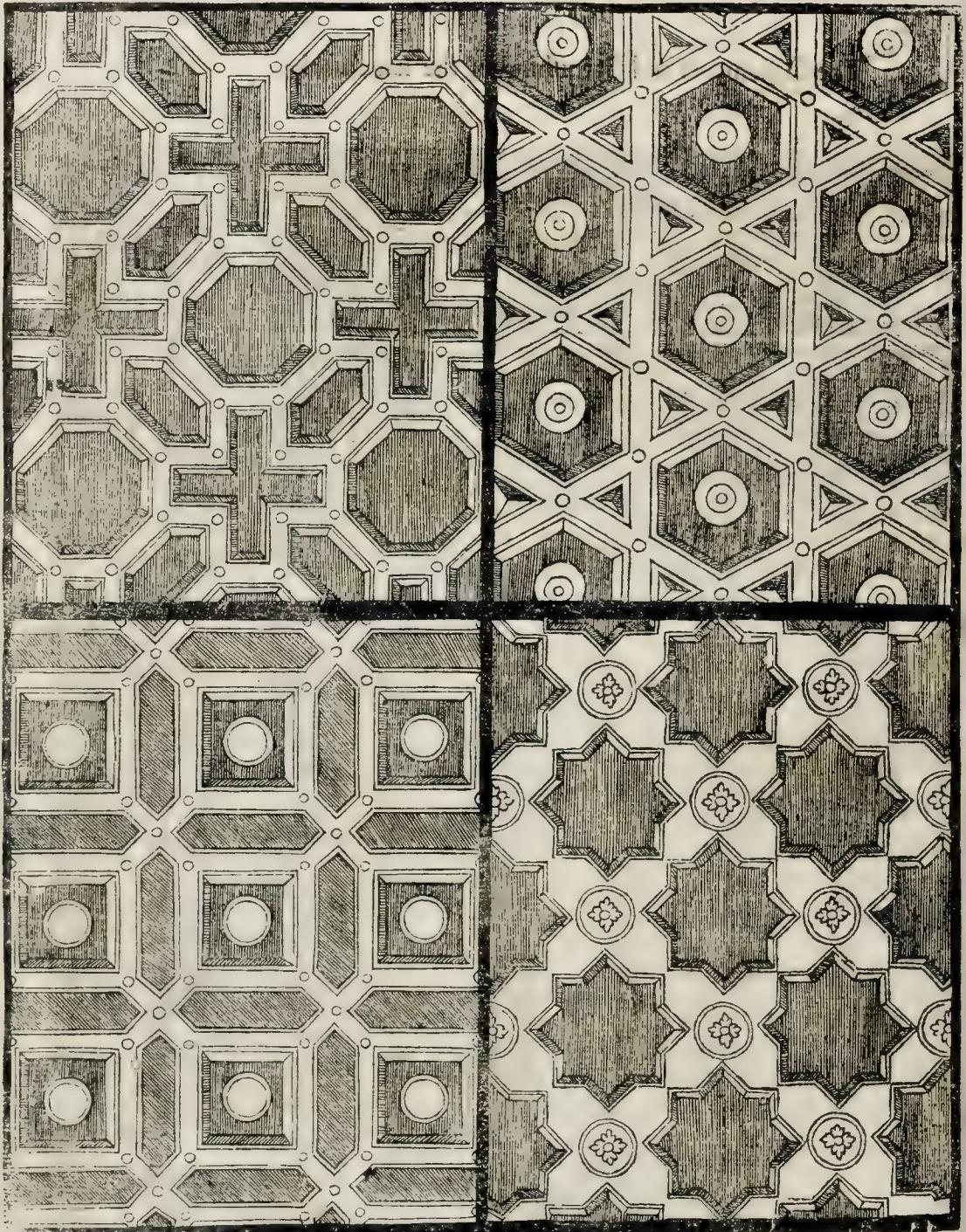
The Timber worke of the sceling aforesayd,



The Ornaments and Garnishing of the same worke.

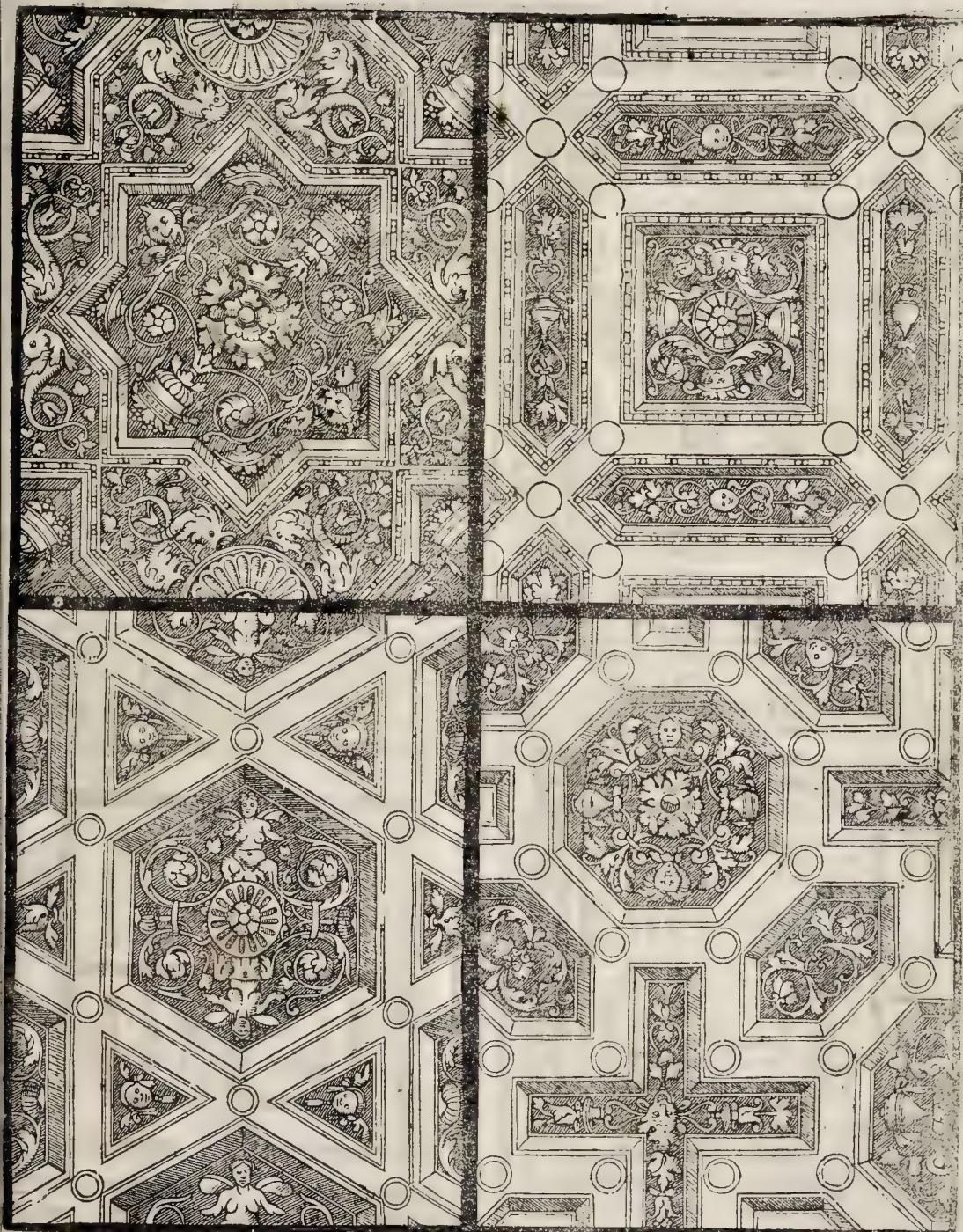


Another maner of Sieling.

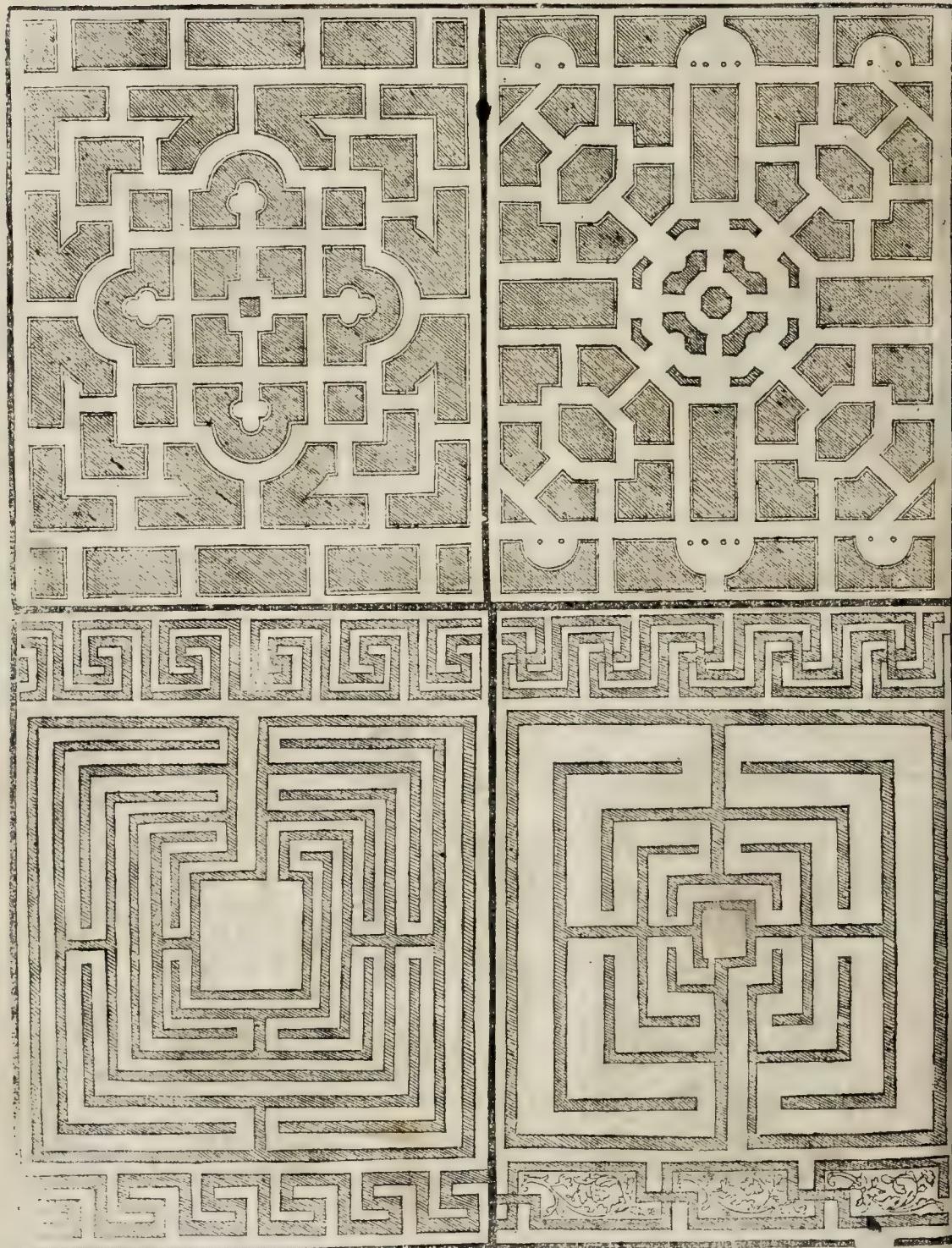


The fourth Booke.

The twelfth Chapter. Fol. 63

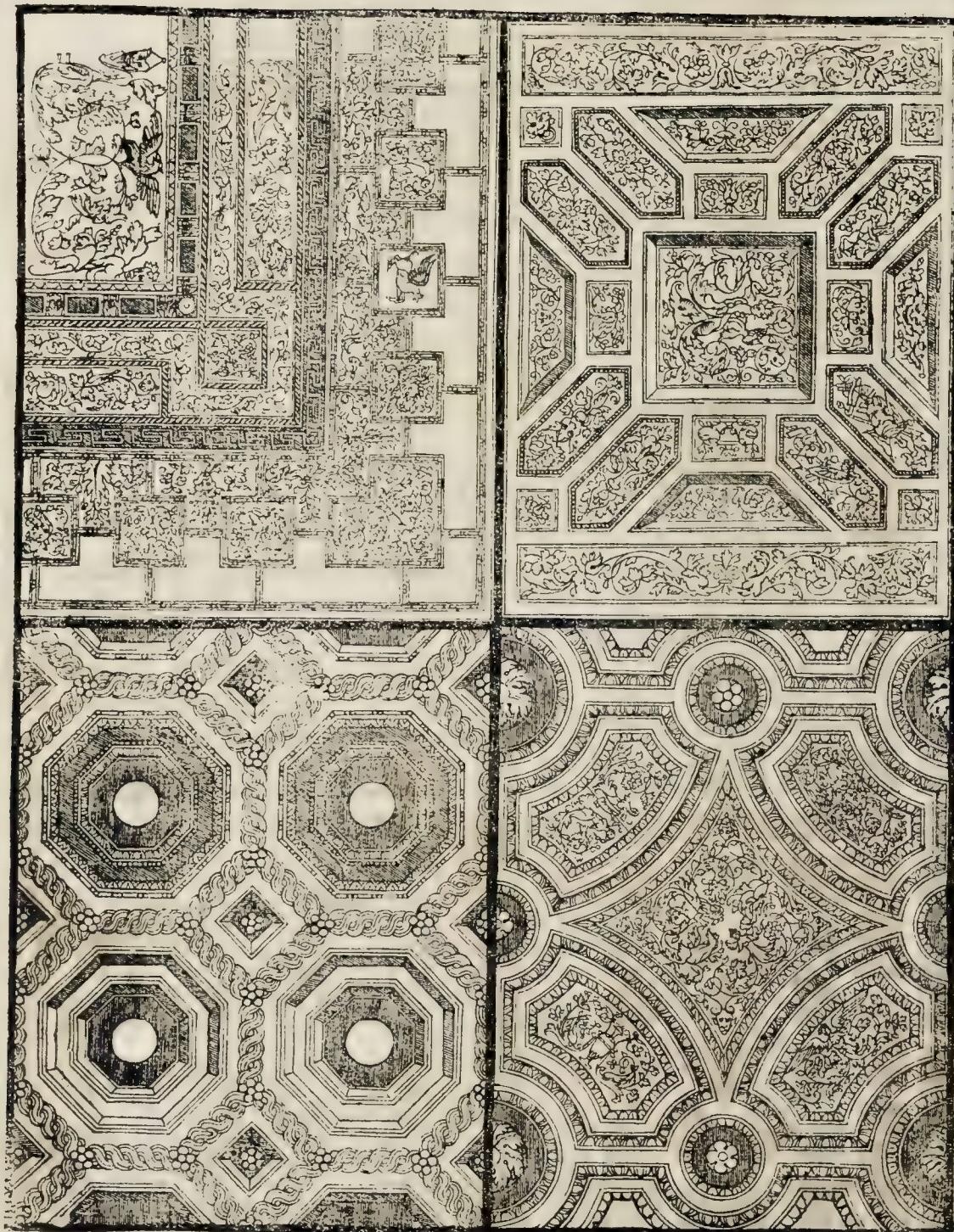


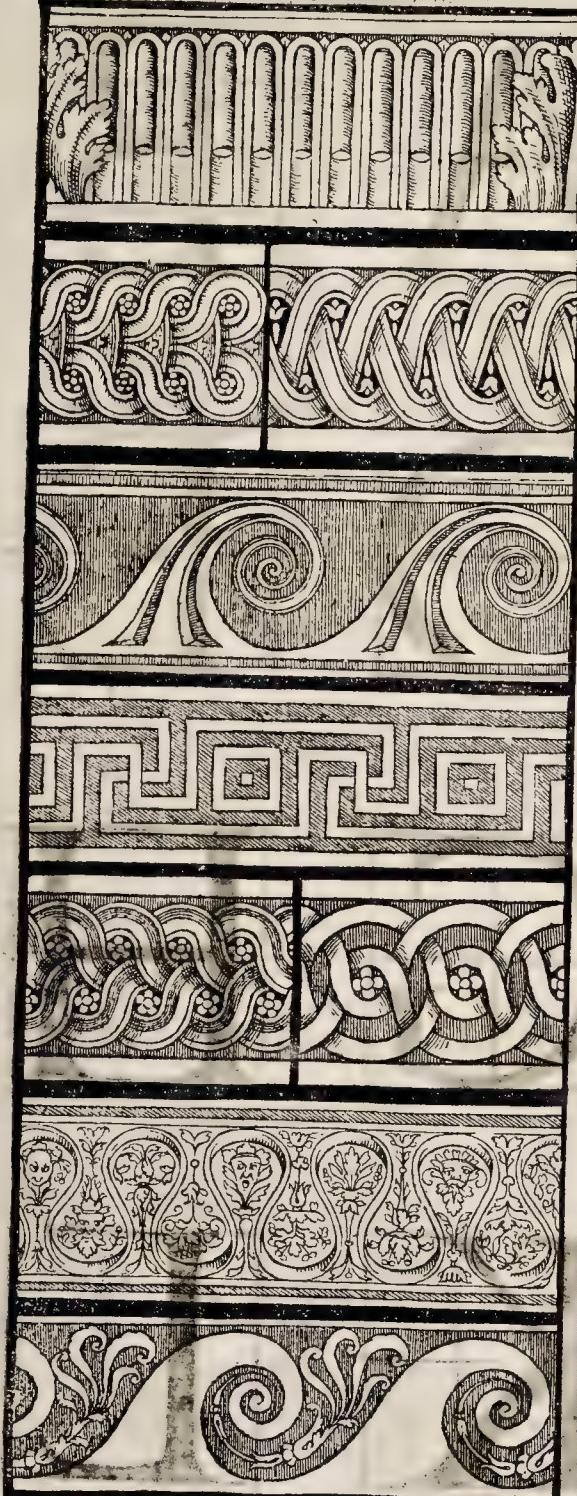
The Garden, being an Ornament to the Building,



therefore these Mazes and Knots, are set in Figure.







The O. of the same measure that you let the Q. The tayle of the Q. is a quarter and a halfe of a foursquare, and stynche q. halfe foursquare; some make it shroter. I will not uphold these letters to be the best, but every man take them he liketh best; it is also no ned to take so much paynes with evry small letter; but if falle h out oftentimes, hat a man is to make them a falle, or lye, more or lesse high; which a man shall never bring to good passe, without following a sure proportion.

Lastly, our Author speacheth of Armes, to shew how a man shall make, colour, and place them, according to state, workmanship, or nature; that thereby a man may perceyue of what stocke, or frā whence it is derived: so, saith he, were sic that in former times man made efigured Princes in their mately, Bishops in Pontifical Robes, Captaynes armed, and every man in such habite, as best fitted his calling and condition. And so he will haue men to make e colour armes, that are to be set vp, vp on, or before houses, with beasts, birds &c. golde, siluer, blue, red, grene, and blacke colours; but no metall upon metall, nor colour upon colour. But so that workmen here in this Country make no Armes after their owne pleasures, too willet them passe, & in place thereof set downe a figure of Letters, the which the wōkeman hath occasion many times to cut, or place above Gates, Dores, in Frasles, and other tabes, therin to set names, titles, deuices, or other supercriptions, at the pleasure of the owners, or to know a Palace, or any other common places of office or otherwise. Nevertheless, so that here there be rysing worke set to fill the place, I will set the Figures of the Armes, which he hath made after the Letters, that the Booke may bee complete. The workman, haing no knowledge of learning, shoulde be much troubled, to seeke faire and nare for one that shoulde write them for him: and althoogh that he hath them in writing, nevertheless, for want of knowing the proportions, they may be spoyled in working, and so bring his worke in contempt; as also those that diew them for him: Therefore, although they are drawne by Lucas Pariolus, Geofry Tory, and Alberus Durer, who, nevertheless, agree not all together, therefore I will set these hereafter downe for a common rule, following our Author, who (letting passe all superstition) hath brought the Columnes & Pedestals into a due measure: by whose authoritie, I would almost say, that a man may make these letters greater or smoller, according to the orders of Columnes; but to write the Symetry, or not, I may not digeste so far out of the way, I will follow Virtuosis, whiche her sayth, that a Ionica Columnis 9. parts high, and by the writing of divers Authors, this forme of Letters is also found in Ionica, and so I leauem them of 9. parts: and whether a man would make them by Corinthia or Compota order of 10. parts, it would not be amisse, so as the Corinthias most bide for the slenderesse, so these Letters, for the most part, are made of 10. parts: by the Dorica and Tholosana, they are made of eight. By that reason therefore, it were not much to be contemned, considering the grossenesse of the worke; also, according to Virtuosis writing, a man may alter the Symetries, as it is sufficiently shewed in other places: so upon some occasions, they are greater & smaller, yea, and shew al together falle to that they are. To learne easly to make these letters, first, you must make a perfect foursquare, and set it in as many parts as you wil give unto letters; but if they be of 6. 7. 8. 9. or 10. parts, more or lesse, the smallest draught shall be the third part of the thickenesse, and the croffe draught the halfe. The corners shall, at least, haue as much Proiecture as the thickenesse of the letter taken with the Compasse. But althoogh one letter is within the foursquare, and the o. without, you may set in the figure, where you may set the Compasse to draw the round: you may set

D8
U9
U10

A

B

C

D

E

F

G

H

I

K

L

M N O

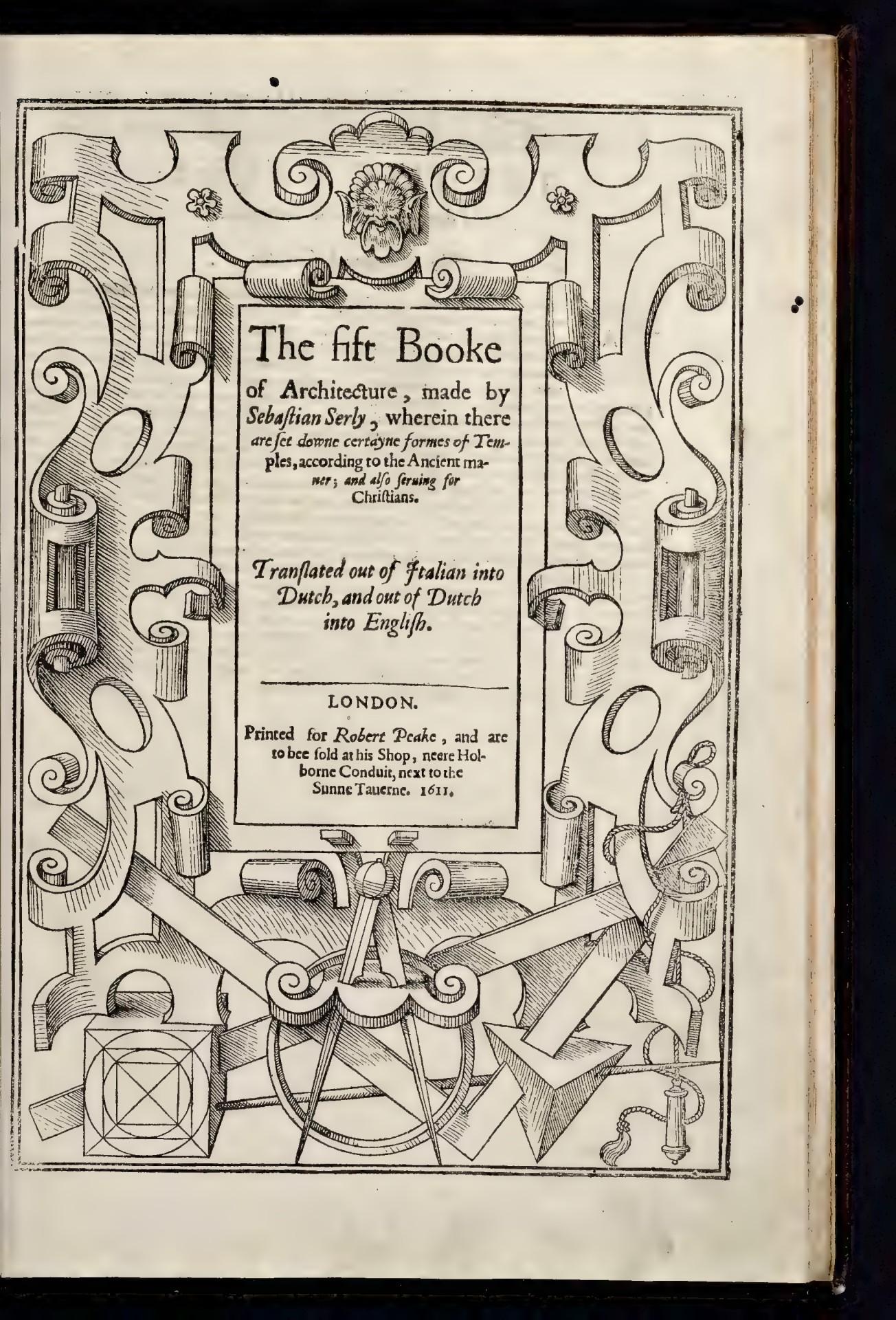
P Q R

S T V

X Y Z



The end of the fourth Booke.



The fift Booke

of Architecture, made by
Sebastian Serly, wherein there
are set downe certayne formes of Tem-
ples, according to the Ancient ma-
ner; and also seruing for
Christians.

Translated out of Italian into
Dutch, and out of Dutch
into English.

LONDON.

Printed for Robert Pake, and are
to bee sold at his Shop, neere Hol-
borne Conduit, next to the
Sunne Tauerne. 1611.



THE FIFT BOOKE:

Of diuers maners of Temples,

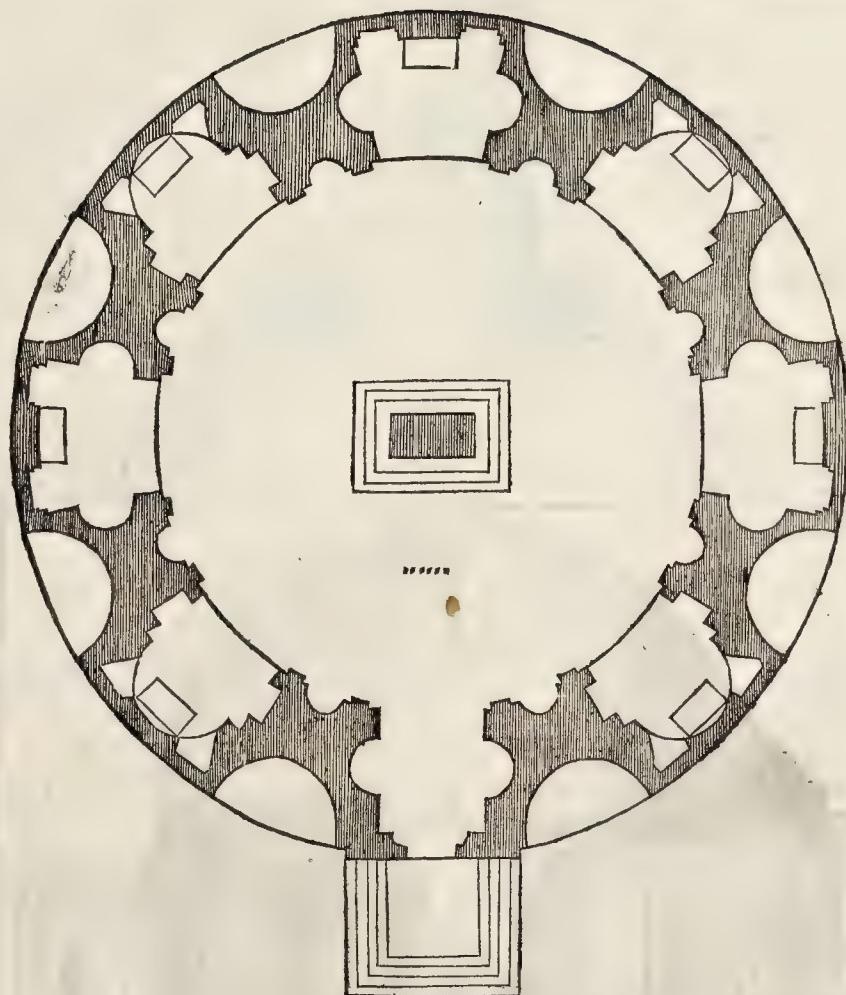
The foureteenth Chapter.



Lthough wee see and find diuers formes of Temples and Churches in Christendome, as well ancient as moderne, yet for that I haue formerly promised to shew some Orders thereof, to accomplish the number of my Bookes, therefore I will intreat of them, and set downe twelue severall maner of Temples, with their grounds and measures: and for that the round forme is the perfittest of all others, therefore I will begin with it: but though in our time, whether it be by reason of small devotion, or cruelty of men, there are no more great Churches begun to be made, and that men finish not them which in former time haue beene begun, therefore I will make mine so small, as they may passe in reasonable maner, for that with small cost, they might in short time be made. The Diameter of this ground shall be as long as high, according to the Figure of the Circle, that is, of 60. foote. The thicknesse of the wall shall be the fourth part of the Diameter, that is, 15. foote, that a man may easily make the Chappells within it: which Chappells shall be 12. foot broad. The Niches betweene the Pillars shall bee fourte foote broad: the other in the Entrie, and of the three Chappells, shall be sixe foote and a halfe broad: and to spare charges of stone and lime, the great Niches shall be made without the Chappell: the bredth whereof shall bee 15. foote. This Chappell is elevated from the earth at least fve steps; and if it were higher, it were not amiss: for the earth in time rifieth, so that men goe downward into many old Temples and Churches, whereunto, in former time they ascended vpwards: but this Stayre would alwayes be vneuen, according to Vitruvius writing, speaking of Temples, where he sayth: that as a man with his right foote begins to clyme vp, he may, with the layd right foote, step vpon the pavement of the Temple. Touching the foundation, a man cannot fayle, if hee maketh it deepe and broad enough: but the least bredth that a man can lay, is this: that a man should from the Diameter of the thickenesse of the wall, make a perfitt foursesquare, and the Diagonus of this foursesquare shall be the bredth of the foundation vnder the wall. And so, I thinke, Vitruvius writheth, where he speakeþ of foundations. But touching the Stofes of foundations, in fast or hard ground, and also in warry ground, I neede not shew it here, because euery man knowes it.

The fist Booke.

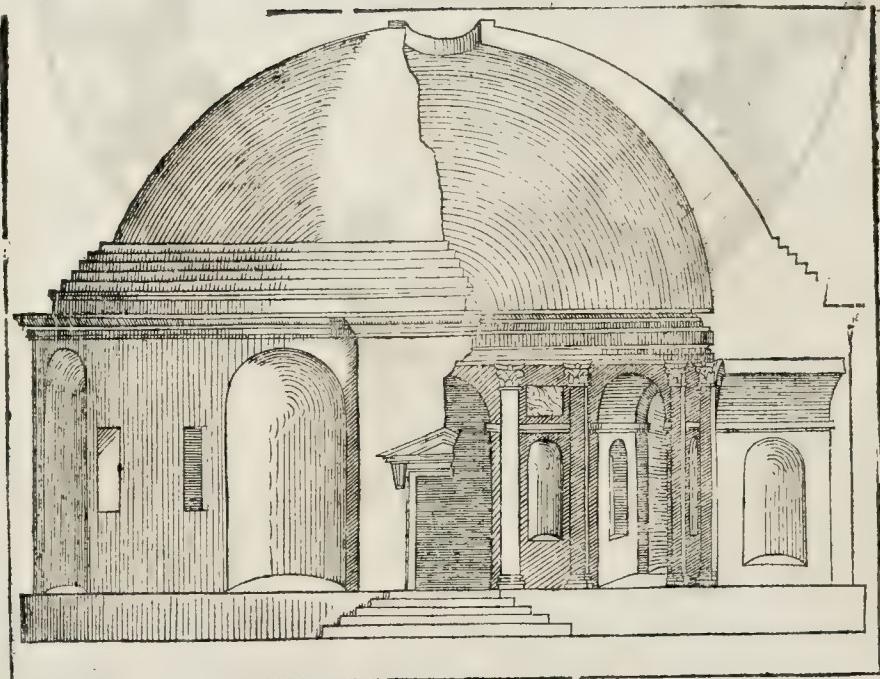
The foureteenth Chapter. Fol.2



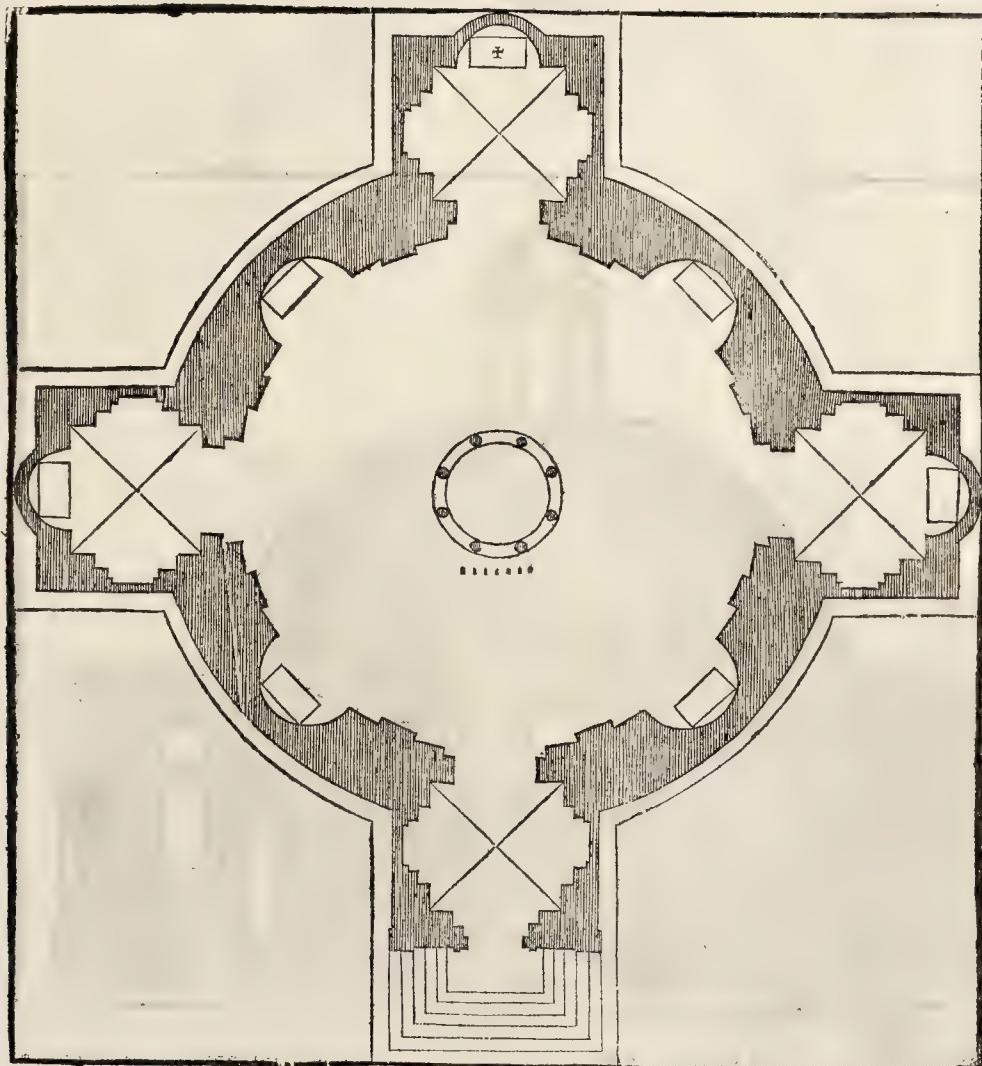
a 2

Of diuers formes of Temples

Having shewed the ground of this round Temple, this Figure sheweth the body of the Temple, both without and within; so that it is purposely made broken, to shew both. The inner part of the Temple is made after the maner of Corinthia. The whole height from the Pavement below, to the Rose above, is 60. foot; whereof 30. foote are for the Buttell or round roose: the rest nertherwards, shall be divided in 5. parts and an halfe; whereof one part shalbe for Cornice, Frise and Architrave. The foure parts and an halfe resting, shalbe the height of the Coloumnes, with Bases and Capitals, whereof altogether, you shall finde the particular measures in my fourth Booke, in the Corinthia. The Pilches betweene the flat pillars, shalbe 10. foot high: the other shalbe of 15. foot high. The hole above the Roos, shalbe the seventh part of the widenesse of the Diameter of the Temple: above, vpon that hole, there may bee a Lanthorne made, stopt with glasse, or it may be left open, whereat there will come in light neare to the mitle of the Temple, so that the Chappels haue light enough at their windows: the top of this Temple will bee covered with Lead: the Cornice without, shall stand like that within, but much greater of members, because it standeth in the weather. Touching the Doores, you find them sufficiently set downe in my fourth Booke.

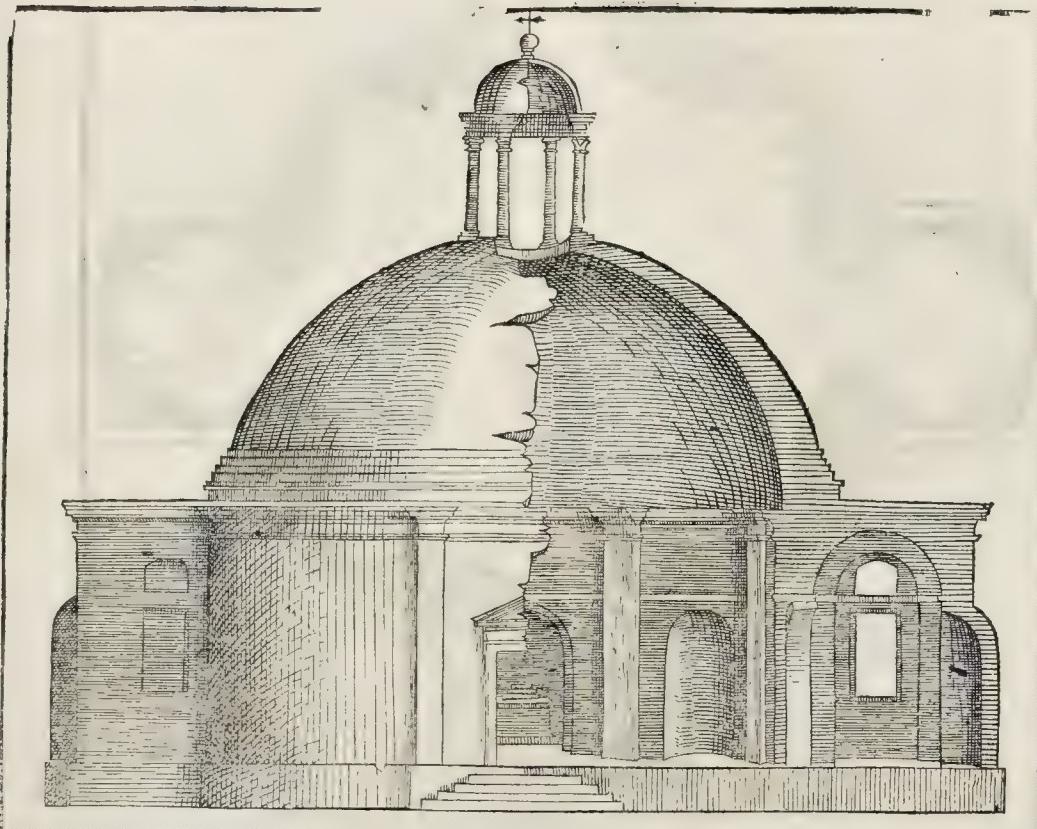


Although the ground of this Temple following is round also, yet it hath an alteration by the four bearinges out, which are the Chappels, and also the going in of the same fasshion. The Diameter of this Temple is 48. foote: the thickenesse of the wall is a seventh part of the Diameter. The Chappels are 14. foot in foursquare, but out the Niches. The other 4. Niches or small Chappels shall be 9. foot broad: the foursquare Chappels have their light on the sides; but the light of the Temple above in the Roofe, shall be wide the fift part of the Diameter, with a Lanthorne upon it, as it is sayd of the other: you shall goo by to this Temple also with fine staires, and for that the corners without the Temple lie alwayes foule, I thinke it were not amisse to make a foursquare wall about it, as high as the going by, that people may so easly come to it.

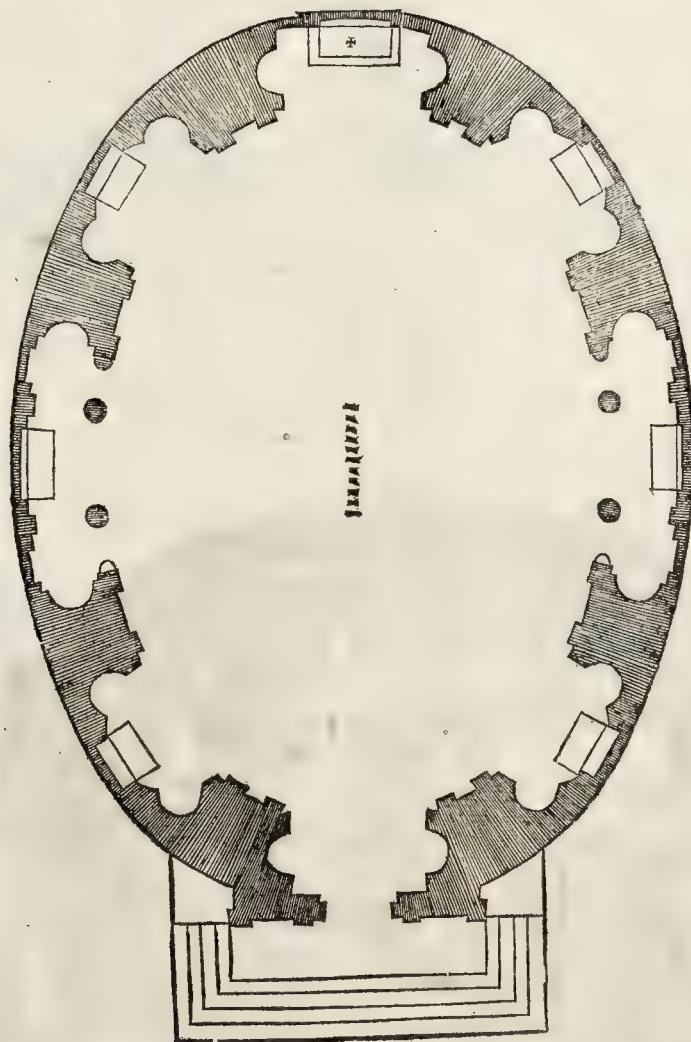


Of diuers formes of Temples

Here you see the Chappel standing byrige (whereof the ground is on the other side) which sheweth as well without. Innes without, because it semeth as if it were broken. The heigthe within, is like the Diameter, that is, 48. fot. The halfe shall be for the halfe round roose, and the hole above for the light, as I lade before, halbe wide the fist part of the Diameter; whereon there shall be a Lanthorne, made with glasse, as the Figure sheweth, and the Roose without, covered with Lead, or other stufse. From the Roofe netherwards, the Concremeint shall bee made of two fot and an halfe high, formed like Impost of the Arch of the Theater of Marcellus, in the fourth Booke and the seventh Chapter, Folio 37. and shall serue for Capitalis, unlesse it be the Plinthus with the Cimatic, which shall serue for Corona. The Pilasters are broad 4. fot gan halfe. The great Chappel's are 21. foot high. The smalest Chappel's shallbe 13. foot and an halfe high, halfe round above. Above those 3. four esquare Chappel's, and over the going in, there may be stā couers, somewhat falling downe to bōrd the water: a man may also make steps within the thickenesse of the wall, to goe up, and an yon of stone raps, to rest of leane vpon. The Templo may bee covered byth such stufse, as may best be prouided: but Lead would be the suest.

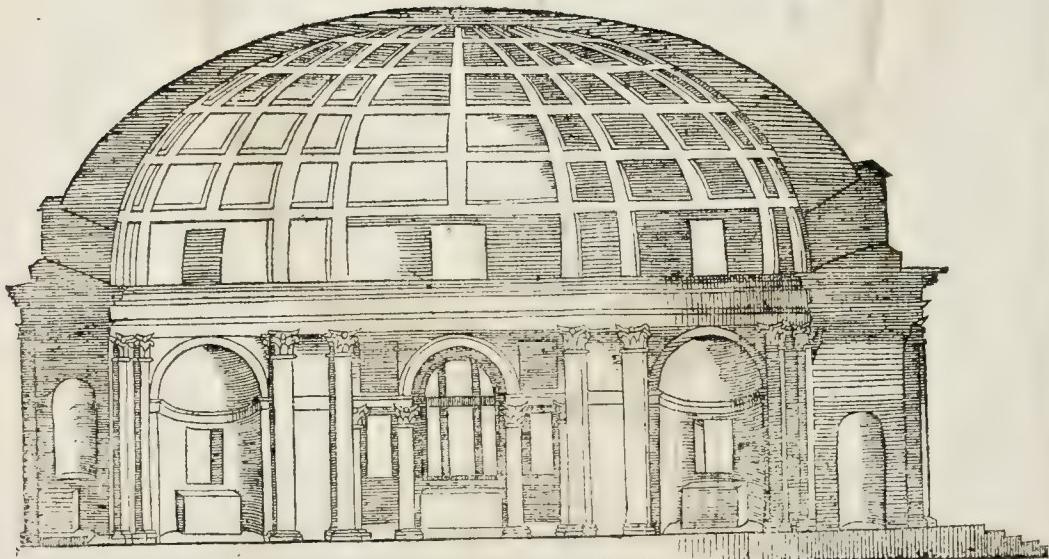


After the round Figure, which is the perfectest, the best are the Duale, that is, like an Egge; therefore I have made a Temple of that fashyon: which Temple shalbe 45. foot broad, and 65. foot long. The thickenesse of the wall shall be 8. foot, & within it the Chappells shall stand: and although they be not to large, yet a man needes not cut them off. The widenes of the 2. greatest Chappells, holds 20. foot and an halfe; within the which are two P'ches, each 4. foot broad. The Columnnes shall bee a soote and an halfe thicke, and the halfe Columnnes accordingly. The spaces betwene the middlemost Columnnes shall be 7. foot and an halfe: the other shall contayne 4. foot and one fourth part. These two Chappells shall each of them haue 3. windowes: the middlemost shalbe 6. foot wyde, and the other on the sides each thre foot. The Chappell with the high Altar, shalbe 10. foot broad, and 6. foot farre in the wall, with Riches, like the great, and a windooe aboue the Altar, of 6. foot wide. The 4. other Chappells shalbe a halfe Circle, 10. foot wyde, having the like Riches also, and a window of 4. foot wyde, aboue the Altar. And for that this Chappell hath light inough of it selfe, it might suffice for the whole Temple: but to make it lighter, there may be windowes made aboue the Chappells. This Temple shall also go vp five steps: the doore shalbe sixe foot wyde, and shalbe beautified with 4. Pillars, after the Corinthia maner: the going in Hallie like the Chappell with the high Altar.



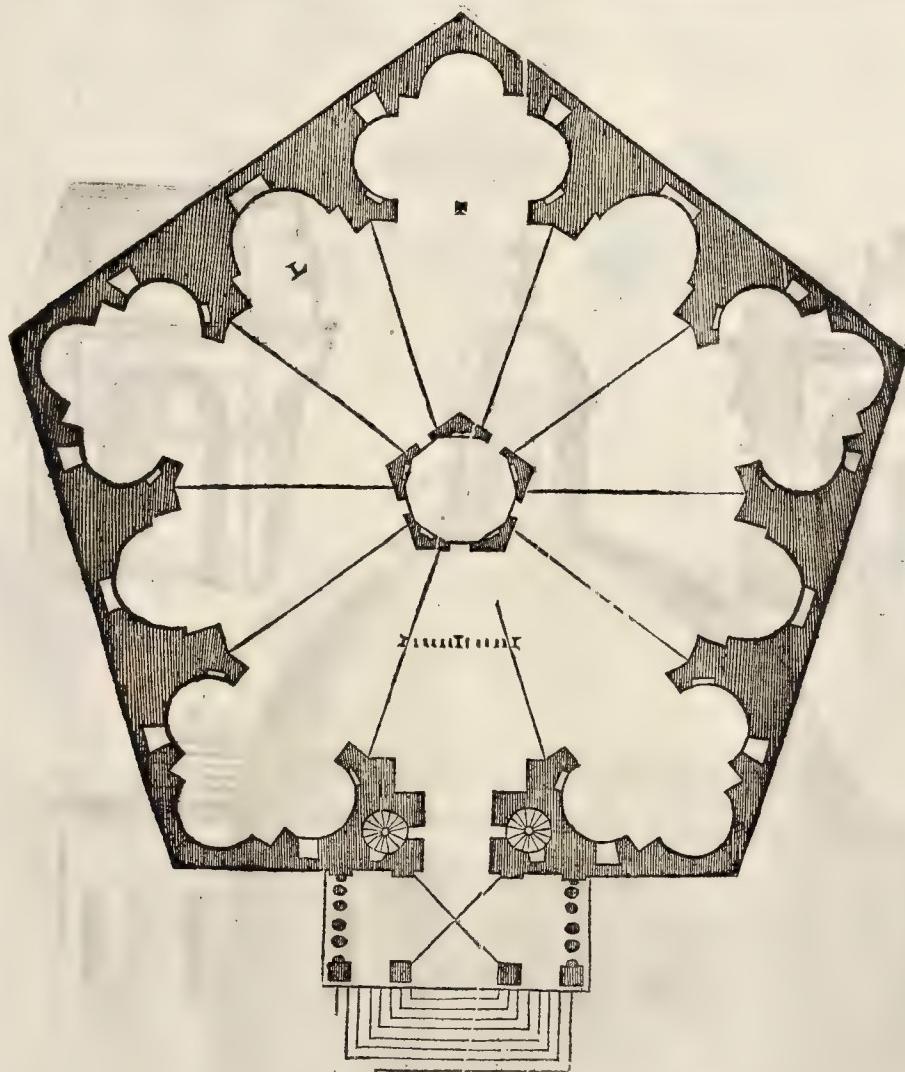
Of diuers formes of Temples.

This Figure sheweth the Duale Temple within, which from the Pavement to the Rose, shall bee as high as broad, that is, of 36. foot: from the Pavement, till you come above the Cornice, it shalbe 23. foot: whiche heighte is divided in five, one part shalbe for Architrave, Frise and Cornice: the other 4. parts shall bee for the heightheight of the Pillars, which separate the Chappells. The particular measures hereof you finde in my fourth Booke, in the order of Corinthia; so that this Temple is made of such worke. The heighte of the round Columnnes shalbe 12. foot. The Architrave, that holdeth vp the Arch, is 2. foot. The Gate (as it is layd in the ground) shalbe beautified with four flat Pillars, of such forme and measure, as shal be shewed in the Temple; and also with such Cornicements: the Gate or Doore shall haue an Arch standing upon two Pillars before one the flat Pillars: the Roofe of this Temple may be beautified, as you see it in the Figure; and richlyre alle, making the Windowes above the Cornice, hanging downewards, as you see, and couer the Temple with Lead, which is best: and so the windowes shall bee pisterned well enough.



The fist Booke. The fourteenth Chapter. Fol. 5

ALthough this forme is fide cornered, which in Building is not so handsome, therefore within I have made it of ten corners. The Diameter of this Temple is 62. foot long: the Diameter of the Lanthornes is 12. fot: the five great Chappels are 15. foot in furesquare, without the three Niches, which are ten foote wide. The small Chappels are 15. foot broad, and goe 4. foot into the wall, to the halfe Circle, which is, 13. foot wide. The great Chappels shall have two windowes, and the small one: the wideness of the doores is 7. fot and an halfe. The Gallery without, shalbe 10. foot broad, and 24. foot long. The 4. Pillars thereof, shalbe 2. fot furesquare. The middlemost space betwene the Pillars, shall be 10. foot, and the other 2. spaces halbe 4. foot. The sides of the Gallery shall have aleaning place made with Balusters: In the sides of the Gates, there shall stand 2. payze of winding staires, to goe up upon the portall, and also rooms about the Temple. This Temple is 9. foot elevated from the ground, and it may be made hollow underneath.

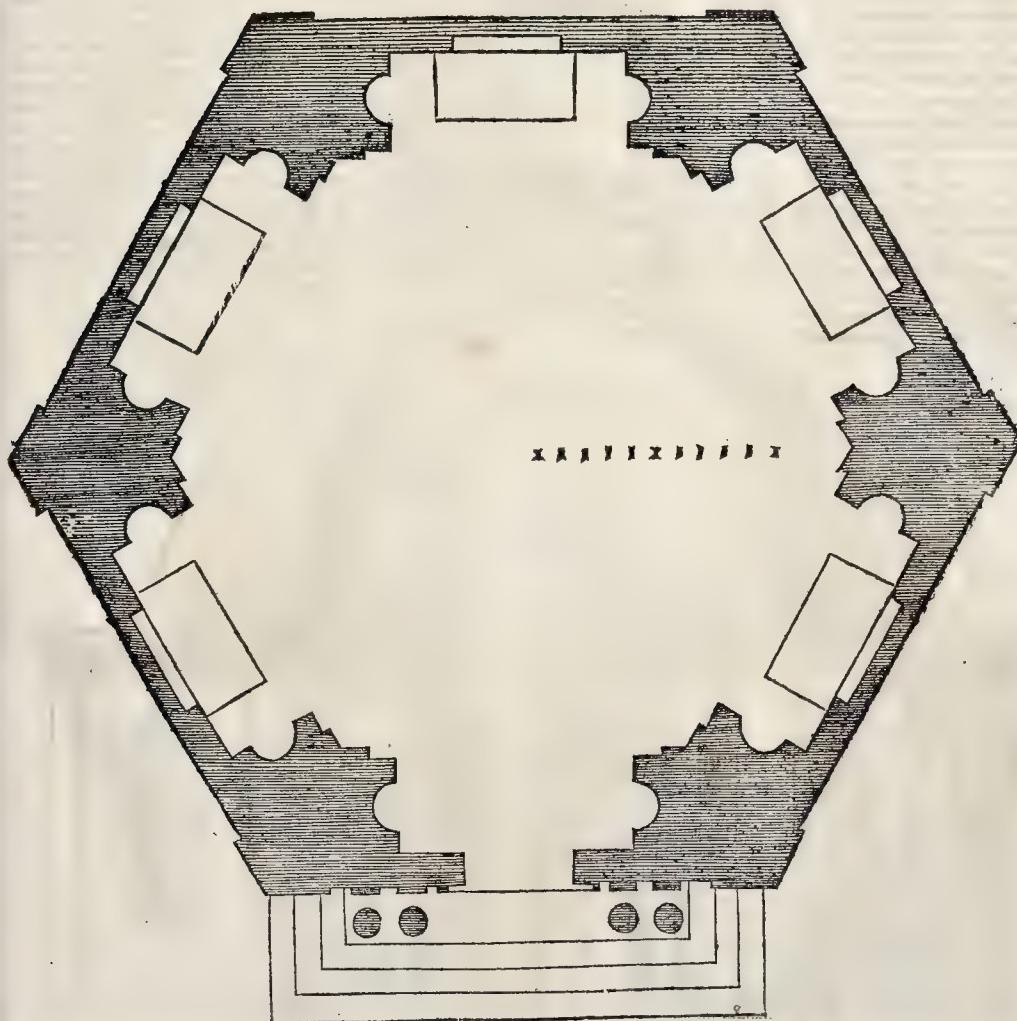


Of diuers formes of Temples

ALthough this Temple is shut, yet I will shew the measure within; it is as high as broad within, that is, 62. foot. The Lanthorne is also as high as broad to the Cornice: the Roote is of halfe a Circle. The roofe of the Temple is also halfe a Circle, high 31. foot, the rest netherwards. The Cornice shall haue two foot and an halfe, formed like the Impost of the Theater of Marcellus, in the fourth Booke, in the order of Jonica, marked T. folio 27. This Cornice shall be set without, like the innermost, but greater. The four square Pillars of the Portall, are 14. foot high, with Basys and Capitall, Doricke. The Architrave is halfe the thicknesse of the height of the pillar: aboue the Arch, the Cornice is the fourth part lesse then the great, but of the same forme, and shall serue for Capitall vpon the Pillars. Above this Cornice, there shalbe a place hiel-highe, made with Iron Valusters. The two pieces above this Temple, shew the Chappels within: and that with the crose, sheweth the greatest Chappell, whereof the light is 23. foot. The other piece marked L. sheweth the lesse Chappell, which is also 23. foot high: the Pilasters that separate the Chappels, are thre fot broad: the height is 19. foot: and there shall be a Cornice made, which shall be round about the Temple, seruing for Capitals vpon the Iapo Pilasters; which forme shalbe made after the Dorick Temple, but a little altered: the Cornicement, vpon the Lanthorne, may be made with Architrave, Frieze and Cornice.



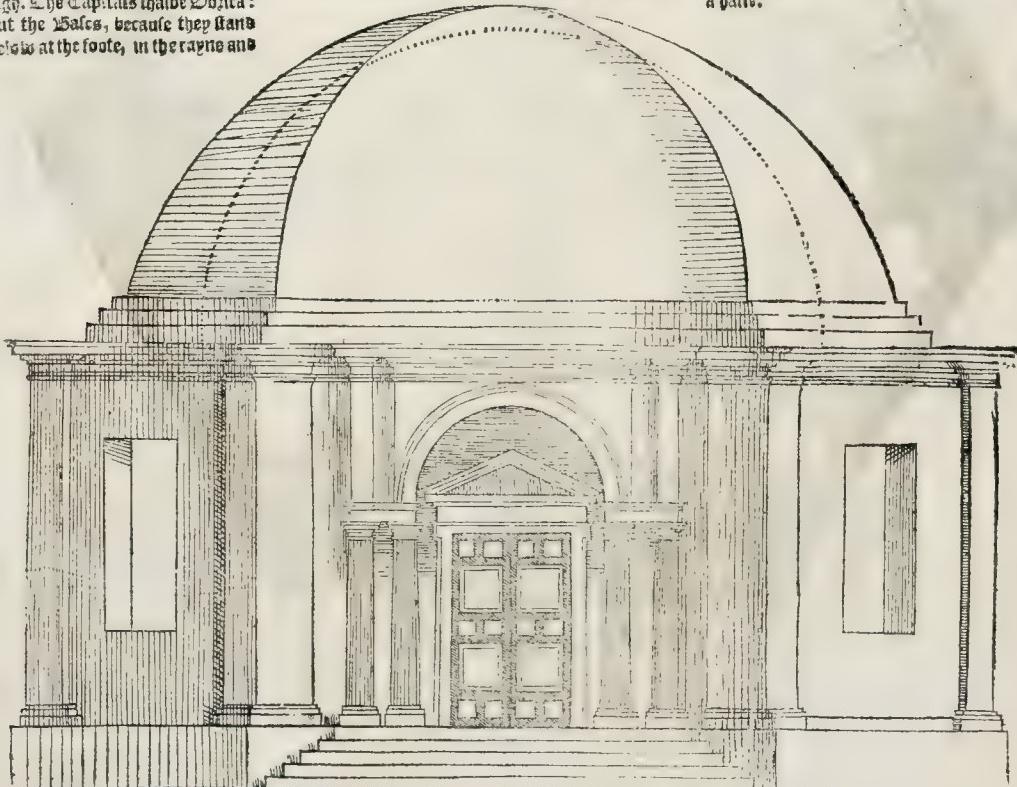
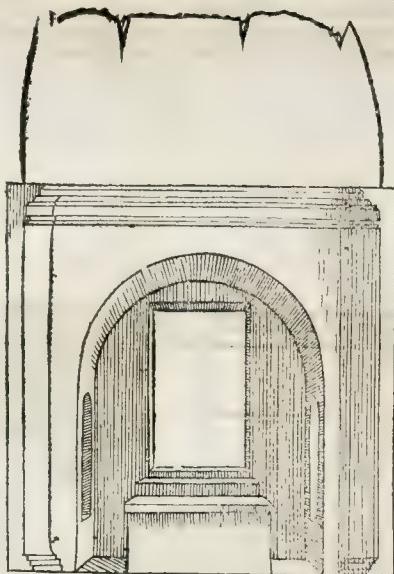
The ground of the Temple following shall be toward, being in Diameter 25. foote, and the wall 5. foote thicke. The widenesse of the Chappells are 10. foote, and stand 4. foote within the wall. The widenesse of the Niches is 2. foote. The Dore of the Temple is 5. foote wide, adorneed with double pillars, which are a foote and a quarter thicke. The going vp is 5. steps, or more if you will; yet bnenen. Each Chappell hath a Window, of fourre foote and a halfe hward, which will bring in light enough, although there be no Lanthorne. On the 6. corners without the Temple, ther shall be flat pillars made, of 2. foote and a quarter broad, comming out a little. And if you would make the Temple greater, and so want of stones you could make it no thicker Columns: then you might make it Corinthia, or Ionica, or Dorica, if you will: and then you may helpe your selfe with Pedestals.



Of diuers formes of Temples

Now I haue shewed the ground of the 6. corner'd Temple, & must shew it standing bygynge, and also descreibe it, as well within as without: for although the Temple be wholly clerc vp, yet I haue set a Chappell aboue over it, to see it within, for that they are all fane of one forme; and the going in also is of the same forme. But touching the outermost part, I say, that the height from the pavement below, till you come above the Cornice, haile 18. foote. The Cornice round about the Temple, shall be made of a foote and a halfe: but the members of the layd Cornices haile made according to the Chapter of Dorica, for that it shall also serue for Capitall vpon the Pillasters, at the 6. corners. Touching the Plinthus with the Cunacie, for that it shall serue for a Copona, it shall go but right throught aboue the Pilasters, as you may see in the Figure. The Pe: tall before shall bee beautified with round Columns, & with flat Counterpillars: whereof the middlemost Intercolammies (or spaces betwene the Colamnes) haile 7. foote and a halfe. The Columnes shall bee a foote and a halfe thicke: but the space betwene each 2. Columnes, and Pillars, shall be halfe a foote: therelaid Columnes haile 8. foote and three fourth parts high. The Capitals haile Dorica: but the Bales, because they stand below at the foote, in the rayne and

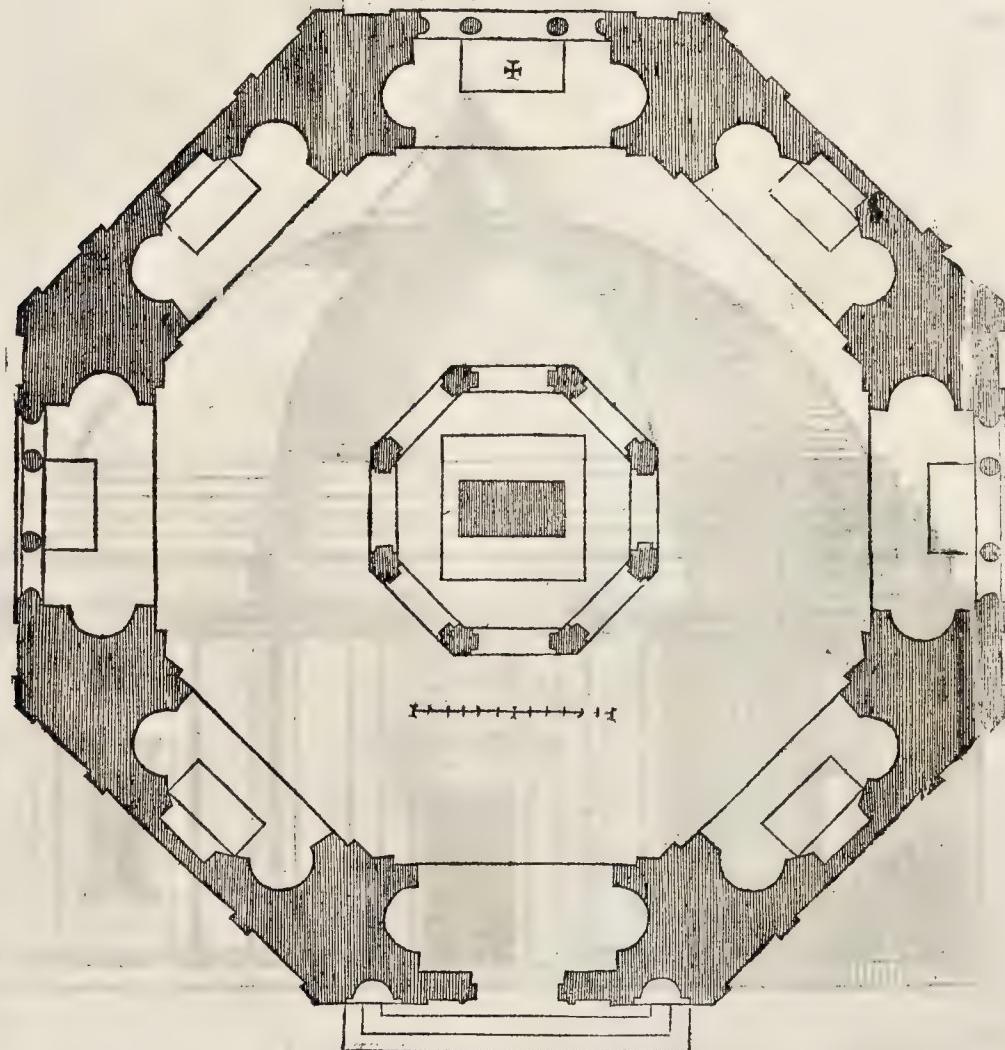
the wido, and also for that they shold bee the Bales for the last Pillare, and the great Pilasters, going about the Temple on all sides, therefore they shalbe made Toulans. The height of the Architrave shall bee a foote, wherenon the Arch shall stand: and the Doore shalbe adioyned as you se it in the Figure. The going in shalbe 3. steps at the least. The Roofe shall be covered with a thing, whiche in those Countries lasteth long, and is easie to bee had, otherwise it were best to be of Lead: and this is touching the workis without. To speake of the interiord part, it is sayd, that I. Chappell length for all: the breadth of these Chappelis hold eac of them 10. foote: and in height 13. foote and a halfe, and enter 4. foot into the wall: on each side they haue a Pichet, which is 2. foote broad: aboue the Altar there is a window, which is 4. foote and a halfe broad: and 7. foote high. The Cornices wherin the Temple shall stand of the same height that the outermost doth, and shall also bee of the same figures: for the Plinthus with the Cunacie, shall also go right throught round about the Temple, without breaching out aboue the Pilasters: otherwise a man may make them much slenderer then they that stand in the rayne and the wind. You may also make the Bales after Dorica: and although all the other Temples shold besoe, haue their heights within, like the breadth or the Diameter so haile they, nevertheless, though it be to final, be halfe a Diameter more higher, that is a Diameter and a halfe, whiche is even and forty foote and a halfe.



The fist Booke.

The foureteenth Chapter. Fol. 7

Although those aforesayd, and some Temples following, haue no Steeple for Bells to hang in, as the Christians use to haue; nor any Vestries, nor other places for men to withdraw themselves in: yet they must, nevirtholes, be handesomely made without, but so, that men may go through the Temple into them: all which subties and inuen-
tions shall not want in my other Booke. The ground of this Temple is 8. square: whereof the Diameter
within halbe 43. foote: and the wall 8. foote. The Chappels are 12. foote wide, and stand 6. foote within the wall.
These Chappels are of halfe a Circle, and the other 3. with the going in are 4. square. Each Chappell hath 2. Pi-
ches, which are 4. foote broad. The 3. windowes in the halfe Circles are 4. foote broad: the other 3. with the Co-
lumnes are 11. foote wide. The Doore is 5. foote wide. In the middle of the Temple a man may set an Altar, cou-
red with a Tribune, vpon 8. Pilasters. The Diameter hereof shalbe 12. foote long: and if you will make this Tem-
ple greater, you may make it more flete.



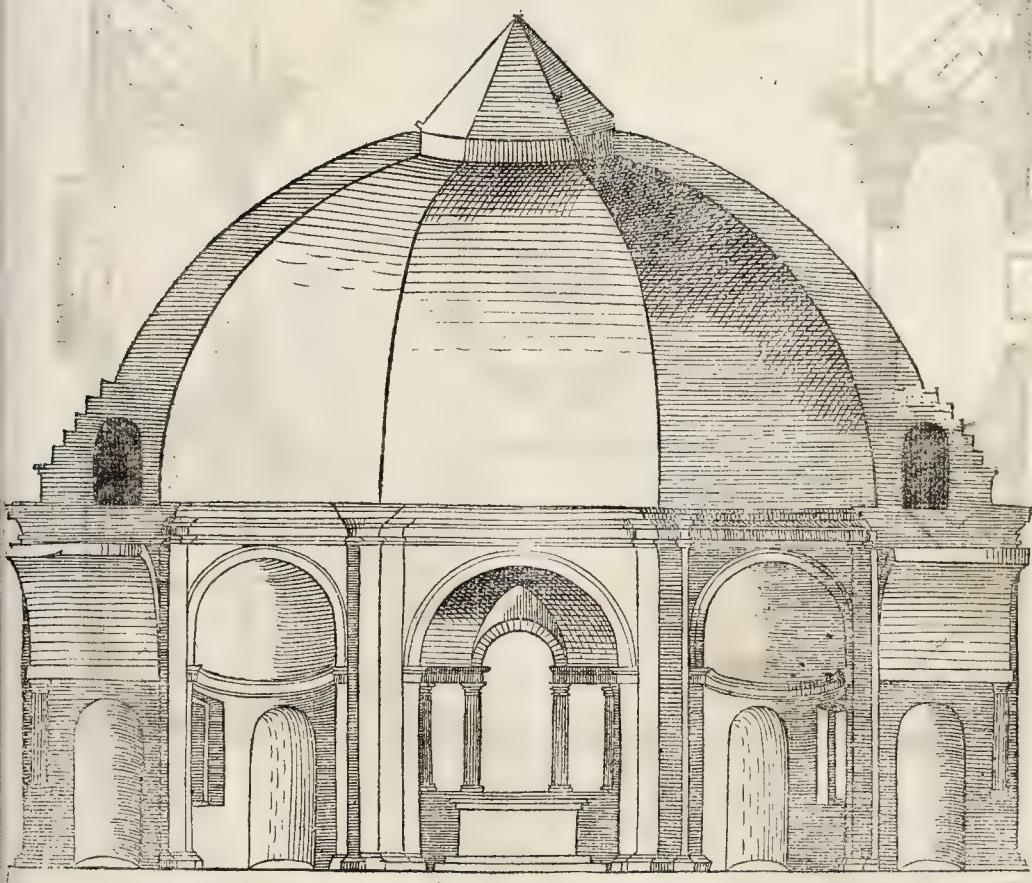
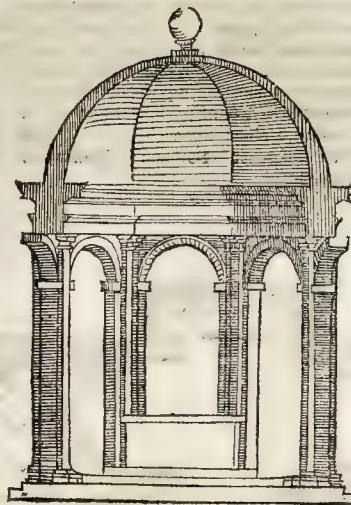
Of diuers formes of Temples.

The Figure hereunder sheweth for the 8. square ground, above set bothe, and is the said Temple as it is without. From the highest step to the uppermost part of the Cornice, it is 21. foote and a halfe, which is the halfe of the intermede height. The Cornice shall contayne 2. foyles, deuided as in the Chapter Descric; and shall also berae out ouer the Pilasters, without the Plinthus, as in the Figure. You shall also set a ample Tafe underrath that fourth parts of a foote high. The breadth of the Pilasters at the corners, shalbe of 3. foote: and those that stand inwards shalbe but 2. foote broad. The Dore is 5. foote wide, and shalbe 13. foote and a halfe high. The Ornamentis of this Dore you find in the fourth Booke, by the Ionica, folio 38. The maner of the wideneſſe is ſufficiently ſhewen in the Figure: if you will haue more light in the Temple, then you may make a hole aboue, and that to be coateid with glaſſe, poynt-wiſe, agaynſt the rayne.



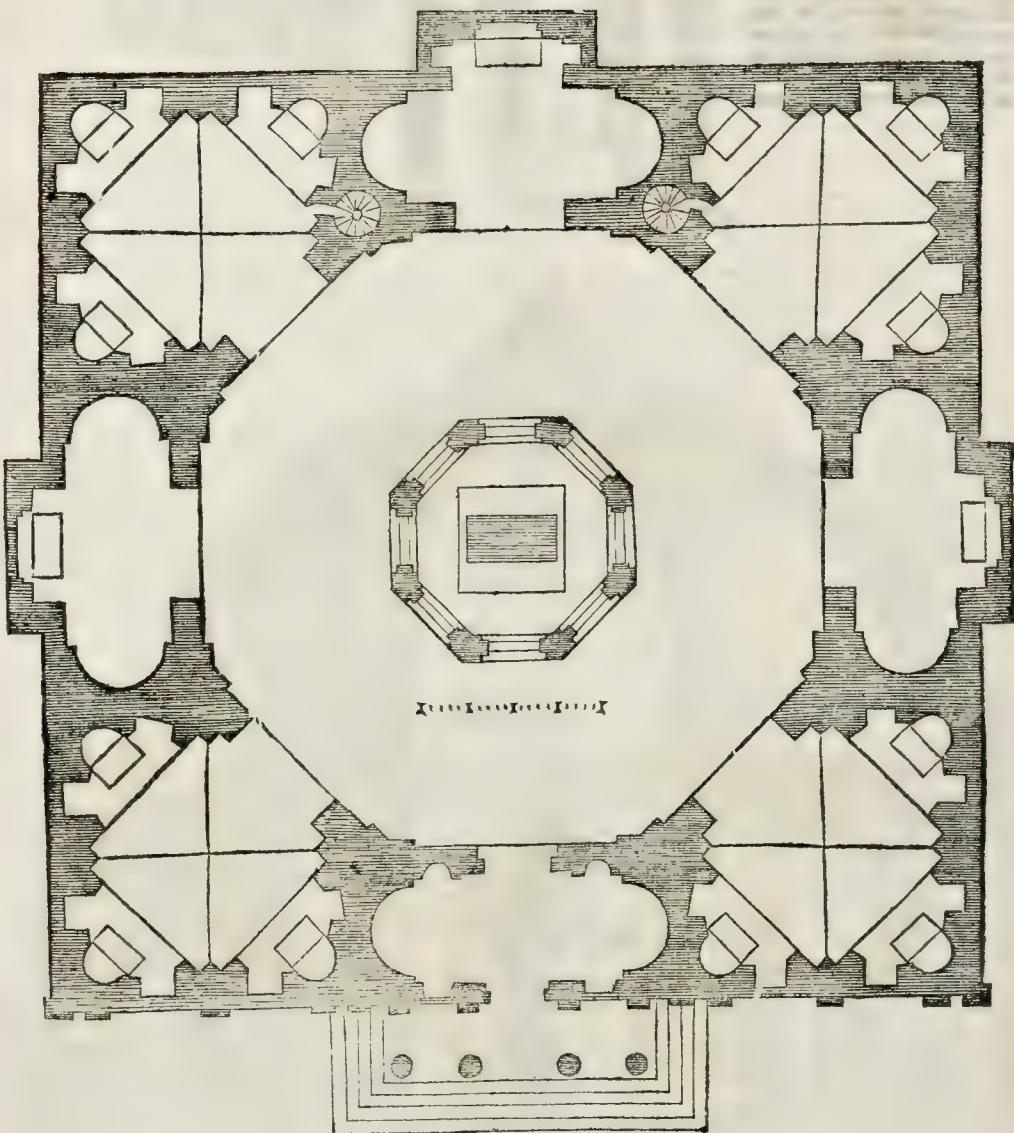
According to this innermost Orthographic, the Cornices and Pillars are of forme & height like the innermost: from the Cornices binwards, the roose is a halfe Circle: the 3. greatest Chappels are roost with Arches, and are 18. foot high. The round Columnes halbe thre quarters of a foote thick, and the halfe accordingly, and shall be sixe foote and an halfe high: the Architraue, whercon the Arch cornices, shall also be thre quarters of a foote: the inter-Columnes in the middle, shall be fourte foote and an halfe, and on either side two

foot and an halfe. The Chappels of halfe a Circle, shall also be 18. foot high: the Niches of all the Chappels halbe tenfoot high: the Tribune that shoulde stand in the middle with the Altar, is figured above: and from the ground to above the Cornice, it is 18. foote high: the Cornicement thereof is thre foote: the rest is for the Pillars, Where, on the sides, you may make Pilasters with Arches, and all Dorica worke, as well within as without. The Tribune is of a halfe Circle.



Of diuers forms of Temples.

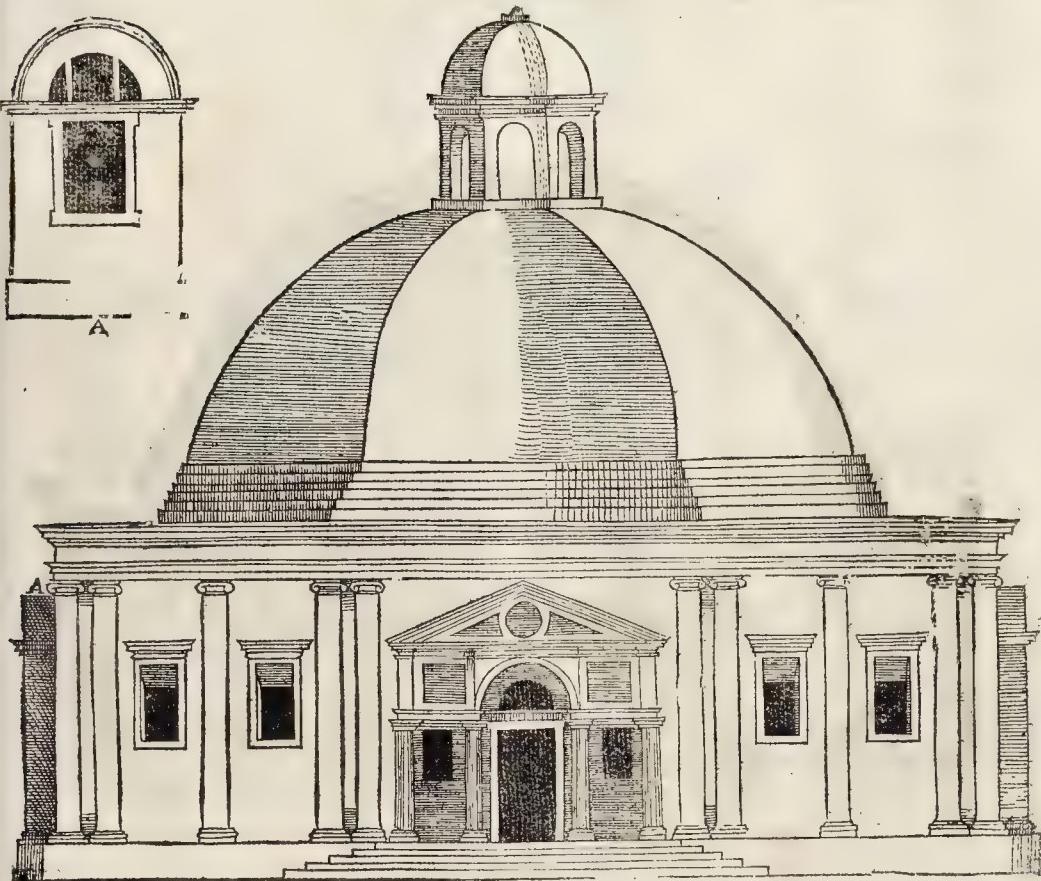
Although this ground without is foursquare, yet within it is 8. cornered, whereof the Diameter within is 65. foot, and the wall 16. fnt. The going in of all the Chappels, is 12. foot, and the wall there, is 3. foot and an halfe thicke. The corner Chappels shalbe 16. foot four square within: the Piches with Altars, shalbe 12. foot broad: the 4. open, and two blind windowes, shalbe 3. foot and an halfe: the two lesser Chappels shalbe 22. foot long within, without the Piches. The Piches shalbe 10. foot byead: the windowes shalbe 6. foot widerth: Portall without, is 27. foot long, and five foot wide: right cur against the flat Pillars stand round Columnes, which are one foot and 3. quarters thick. The doore is 6. foot wide: the Portall within, is almost like one of the smal Chappels. You may also set a high Altar in the middle, with a Tribune, whereof the Diameter is 20. foot: the Pilasters are three foot and an halfe thicke: the flat Pillars at the corners are three foot broad.



The fist Booke.

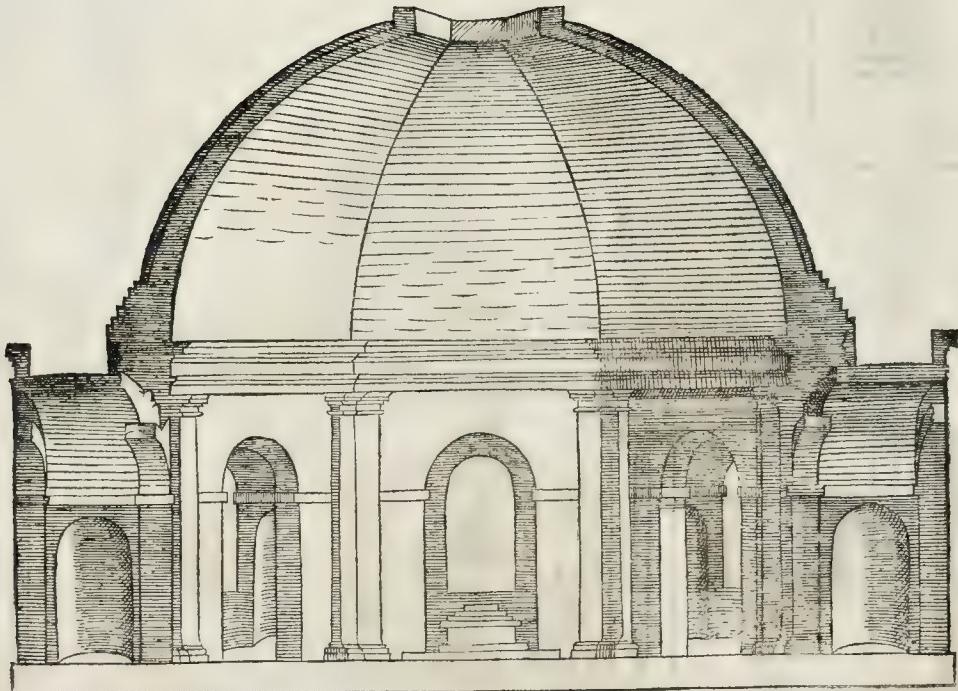
The foureteenth Chapter. Fol. 9

THIS is the Dethographicie of the aforesaid ground, of the eyght cornerd and foursquare Temple, which is the Figure as it is without, whereof I will describe the height: and first, from the Pavement, to the highest part of the Cornice, it is 22. foot and an halfe: the height thereof deuided in sixe parts, one shall be for the Architrave, Frise and Cornice, the other five parts are for the Pillars, which being two foot and an halfe broad, yet they are not too long, because they stand two together, and little rayled up. The measure of all together, you may find in the order of Ionica, in the fourth Booke. Above this Cornice standeth the Tribune, whereon there shall stand a Lanthorne, to gine light into the middle of the Temple, whereof you may easly finde the measure, with the small foot that standeth in the ground. Theround Columns before the Portall, shalbe 13. foot high: the Architrave is a foot: above the Arch, the Cornice shalbe the thickenesse of a Column below, deuided as in the Capitall of Dorica. The Frontispiecie riseth to the Architrave of the Temple: the going up is of fife steps: the small figure marked with A. is one of the Chappells without, which comes three foot out of the wall: the windowe whereof is 10. foot high, beside the light above the Cornice, and above it is halfe round, courred as you see.

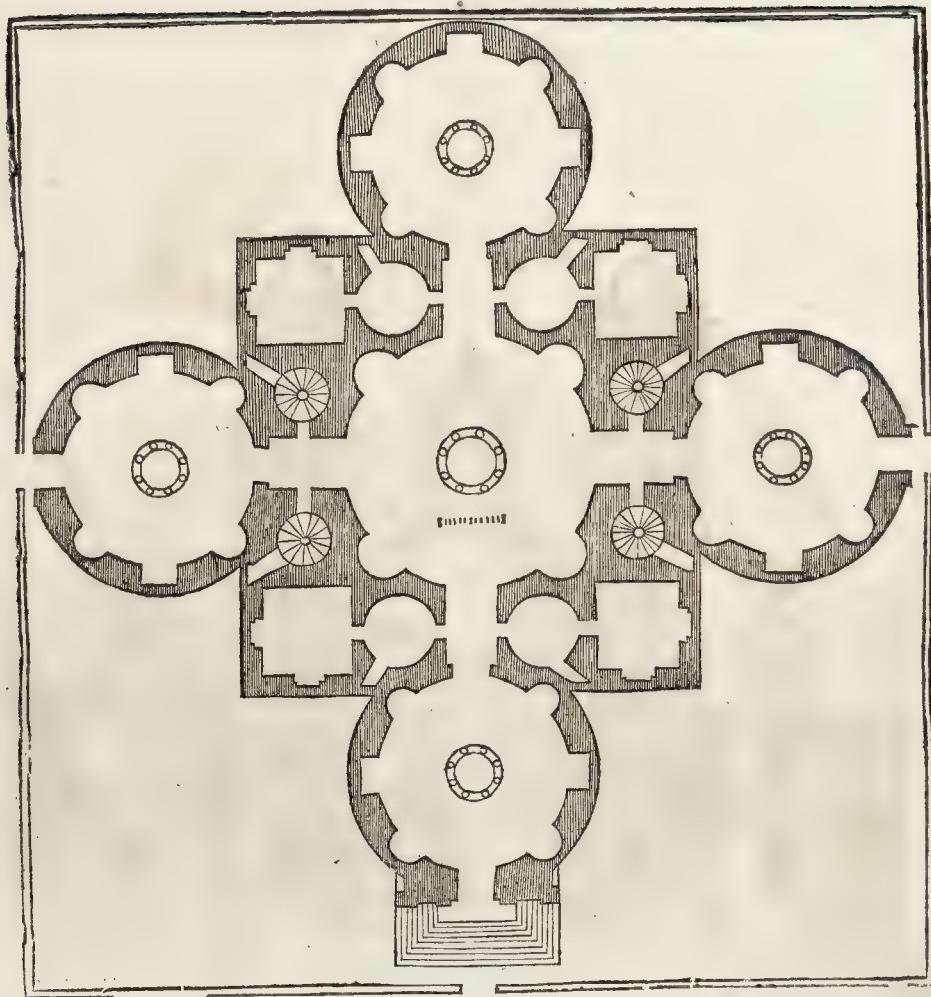


Of diuers formes of Temples.

NOw I have shewed the ground and Orthography without of the Temple in foursesquare, I will also describe the 8. cornered Temple within, & set it here beneath in Figure. And here you se how men going vp the Stayres which are figured in the entry of the ground, go vp to þ faire walke. The height of this Temple within is almost like all the Temples before set downe, and also which are found in Antiquities, that is, as high as þis ad, which forme is taken out of the Circle. The round Roofe, as soþ the halfe Circle, occupiþ the one halfe, and of the other halfe downewards there shalbe 6. parts made, whereof one part shall be for the Architrave, Frise and Cornice, which shalbe made after the Dorica: the other 5. parts are for the wall with the Pillars, which alþ are 2. foote and a halfe broad, like the outermost, but soþ Capitall and Bas, like the Dorica. The measures both of Capitals, Bas, Architrave, Frise and Cornice, you shall also find in the aforesayd fourth Booke, in the Order of Dorica. The breadth of the going in of all the Chappels is 12. foote: but the height of the sayd Chappels is 24. foote. The 4. greatest Chappels which stand in the corners are 14. foote within, foursesquare, with their Plasters, with Arches upon them. The height of all the Niches, as well of those that are 10. foote broad, as thole of 12. foote, shall all be 15. foote high. The Lanthorne shall hold 13. foote in Diameter: and the rest the Architectoþ shall easly find with the small foote.



This ground standing hereunder may be named crosse-wise, whereof the principall place in the middle containeth 48. foot in Diameter. The 4. Niches, with the 4. goings thorough, are each 10. foot broad; but the goings thorough are 15. foot long. The four small Temples hold in Diameter 36. foot; and their Niches, and Windowes, (wherin you may place Altars) and the Doores are each six foot wyde. The 4. places within the 4. corners, may be dwelings for Priestes, & other Church Officers, and are 16. foot four square: above them, you may place four Towers, and go vp into them through the staynes. The four round foynes may be Vestries, and other places for men to withdraw themselves. This whole four square, without including the innermost round Temple, contayneth on all sides 88. foot. The principall going in shall have 9. steps, and the Doores may also bee greater then the other two in the sides.



Of diuers formes of Temples

Item the ground before shewed, here standeth the Orthographie of the said Temple with one of the sides that is before, although a man should set them out alloure, at least thys, in this maner. The height of the first Story, beginning at the highest step of the going up to the uppemost part of the Cōnicē, shallbe 38. foote; which height, deuided in 6. parts, one halbe for the Architraue, Frise and Cōnicē, and this shall inclose the whole Temple round about. From this first Cōnicē, to the second of the middle Temple, it shalbe 13. foote: of this height you shall make 5. parts: whereof one shall be for the Frise, Cōnicē, and Architraue. The same great part of the Cōnicē shall also serue for the Lanthorncs of the 4. leaff Chappells: which Lanthorncs within shall contayne 8. foote in Diameter. The 3. Oder agaynst the 4. Towers shall have but a flat Face, right like the foote of the greatest Lanthorne which standeth upon the round roose. The layd Lantheorne within shall hold 10. foote in Diameter; and the height without the little stone shallbe 16. foote: this height deuided in 5. the one part halbe for the Cōnicēment of this Lantheorne, and the other halbe Corinthian Pillars. The fourth Oder of the Towers shall also be of the same height, and beautified with the same Cōnicēment: and although that from this Cōnicēment netherwards, the Oder of the Towers stands not very handsonely, because they are forced to payd to the Cōnicēment of the Temple; yet according to Antiquity, it is a fault to be borne withall. The uppemost parts, which in no sort are tyed to any thing, shallbe as high as the thickenesse of the layd Towers. The 5. part of that height shallbe for the Cōnicēment, and the rest, for the Columnes, made after the Ionica. Abone the Cōnicē the leaning place shallbe made, with the round roses, as you see.

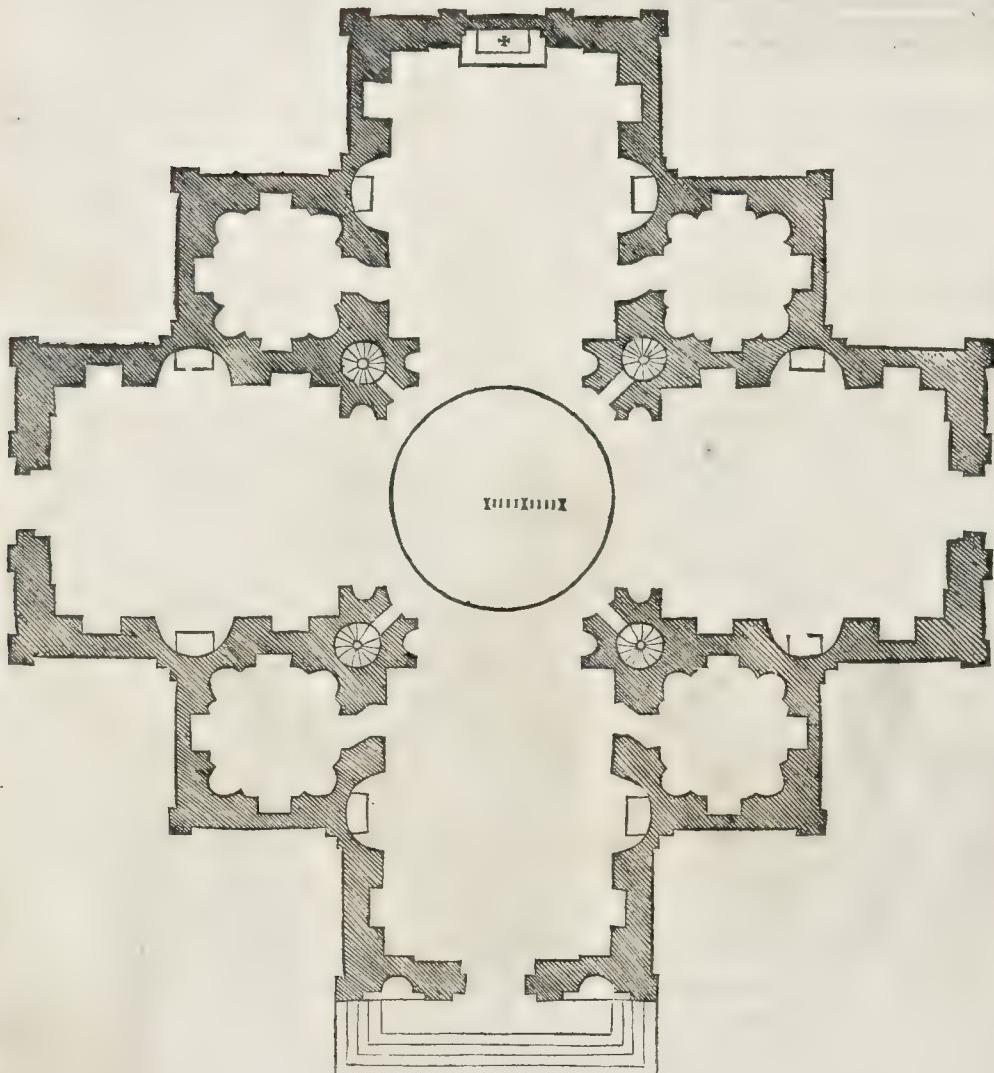


Hereunder followeth the Orthographie of the aforesayd Temple within, that is, the hale of the 3. Temples. And so that the middlemost Temple shal receive more light then from the Lanthorne, as the other also doe by the windows below, it is requisite to make the Cornices without higher then the innermost, that a man may, almost, receive the light perpendicular wise, as you may consider it in the Figure. From the Pavement, to the highest part of the Cornice, it shalbe 44. foot. The Cornice (because there are neyther Columnes nor Pillars about) a man may make bastard, and at his pleasure, so it haue not much bearing out, that it may not take away the sight of the roofer. The Cornices shalbe a foote and a halfe high, and may bee made according to the Capitall of Dorica. The height of all the Piches are all 15. foote: above the Piches, there shall a Facie goe round about the whol part of the Temple, as well the small Temples as the great. Aboue the Facie the halfe round rooses of the 4. Chappells shall stand. Aboue these 4. Chappells there shalbe a playne, made a litle hanging, to cut off the water, with a place brethigh round about, where, by the Stappes, a man may go thongh to the Towers: and if that this Temple standeth in any open place, then there will be a faire walke aboue it; you must be carefull that you let no snow lye upon it, for it locketh in and hurteth the roose. The Doores on the sides haue also 9. steps, although they stand not marked in the ground: and as these and the like houses stand so high, or not so high, from the earth, a man may well make them places of devotion, or otherwise. We see commonly, that round about the Churches all corners lye full, which is vncinill for sanctified places: therefore I would thinke god, that it shoulde be walled round about as high as the steps, that it might not be so ready for people to goe in, and that it were hallowed for a Churchyard. The Towers that shoulde stand behind in this hale, because they stand not upon this Diameter, and also for lesse cumber, for that men may conceiue how they are placed: therefore they are not set downe in this Figure: and what there wanteth more, it is referred to the discretion of the workeman, who, in building thereof, shall finde many accidents which a man cannot write nor remember alat once.



Of diuers formes of Temples.

ALthough the aforesayd Temple is shewed to bee cross-wis, neverthelesse, this that is haere set downe is much liker: and first, I will speake of the first going in, which shall serue for all the rest, for that they are all of one forme. The widenesse is 30. foot, and the length 37. foot. The wall is seven foot thicke: in the middle, on evther side, there are two NICHES, which shall each of them be tenne foot broad. The Doore is eyght foot wyde: the going through, to goe into the Circle, is 22. foot wyde. The Pilasters there, are seven foot thicke: the NICHES, four foot. Within the Pilasters the Stappes shall stand to goe by, and that the Pilasters should bee the fassher to bera the Tribune, in the faire corners, behinde against the Pilasters, you shall make these eyght cornered Chappels, of 18. foot in Diameter, and the wall is foure foot thicke. The NICHES, Doores, Windowes and blind windowes, shall be five foot wyde. The coyners of the Temple without, haue their flat Pillars of thre foot broad: the going up is of fve steps.



The fist Booke.

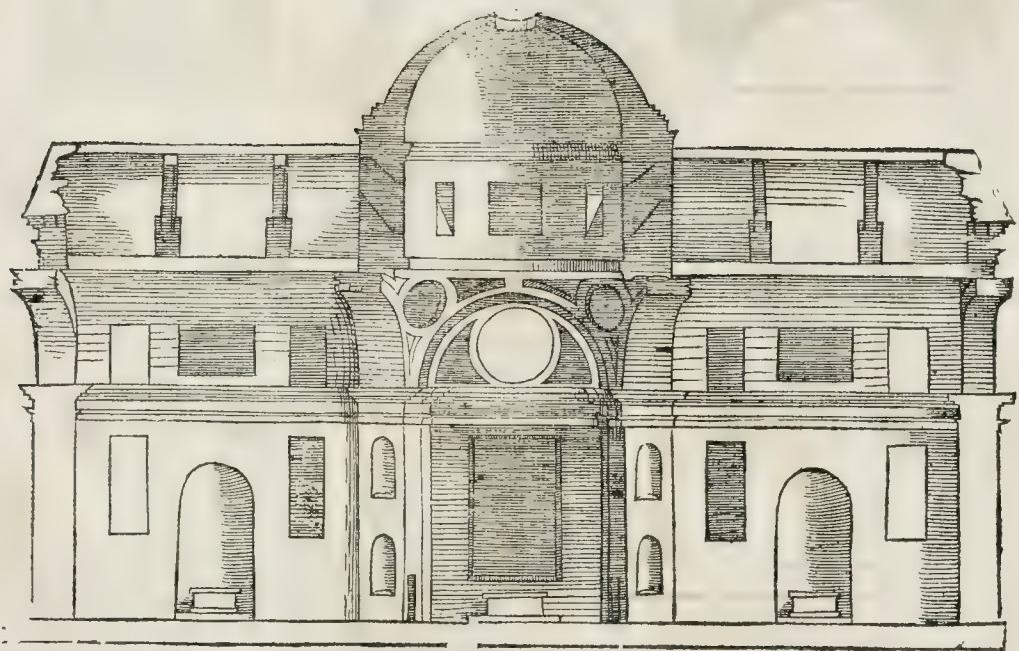
The fourteenth Chapter. Fol. 12

The Orthographic without of the four cornered crosse Temple, is hereunder set downe, and is 44. foot broad at the going in; and the height from the ground to the Cornice is 30. foot: the Cornicement is five foot: the rest reaſteth for the Pillars, which shoulde be Ionica. The ſecond story is 22. foot high: which height ſhall bee diuided in ſix parts, one halfe for the Cornicement, and the other fiftie for the Corinthia Columns. These two ſexies the Temple ſhall haue, whereof you ſhall haue the meaſure in the fourth Booke. The roofs ſhalbe 10. foot high, but here in the Land where it bloweth, raineth, and ſnoweth much, it may ſanke much higher. Above the upper part of this Frontispice or Roofs, there ſhall be a Cornice of two foot, wheron the Kettle or the round Roofs ſhall ſtand, hauing a Lanthorne vpon it, which is 10. foot high, without his cover. The part marked C. ſhelveth the cover or roofe with in, and the other marked L. ſhelveth one of the 4. cornered Chappels: and although there ſe 5. ſteps, for a going vp, ſtand equall to this Doore, they ſhould alſo be made to the other two doores on the ſides: and the ornaument of the doores you ſhall ſind in the aforſayd Booke, in the order of Ionica.



Of diuers formes of Temples

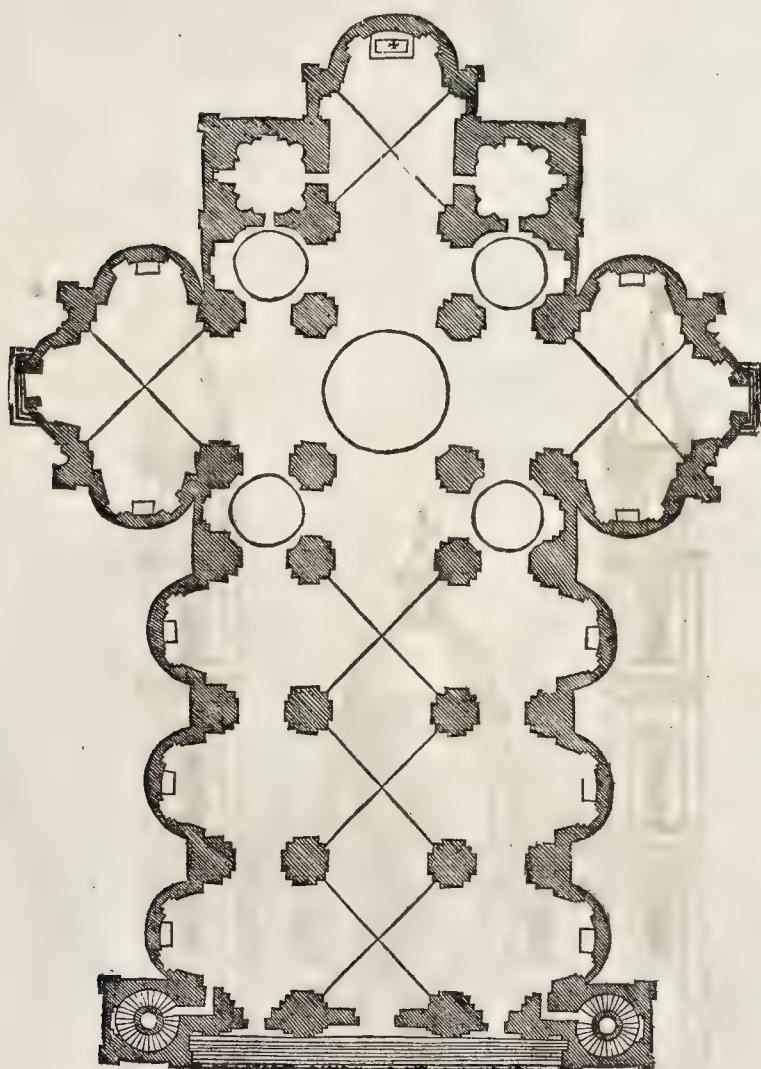
Having shewed this foursquare croſſe Temple without, now here followeth the part within, as if it were Diane Hier like, cut even in 2. parts. And first, ſpeaking of the middle wheren the Tribune ſtandeth, there is from one of the Corners of the Pilasters, to the other, 30. foot. From the pavement below, to the highest part of the Cornice, it is alſo 30. foot. The height of this Freſe, Architrave, and Cornice, is 5. foote, and this ſhall goe round about the Temple within. Upon this Cornice the Arches reſt which beare up the Tribune. Above the Arches there is a great Faſcie, and from hence upwards it is 15. foote high. The Cornice halbe 2. foote: but ſhall not leare much ouer ouȝt, not to let the roſe. From this Cornice neþerworts, to the Faſcie, there halbe 8. having windowes made, of 7. foote, foursquare, as you ſee it in the Figure. The Lanthorne halbe 5. foote wide. From the pavement, to the hole of the Lanthorne, it halbe 77. foote high. The place where the high Altar ſtandeth, is right ouer agaýnſt the principall going in. In the great foursquare there may be an Altar Table ſet: and above it there ſhall bee a great round window; as alſo above all the 4. Doores. I ſee not why any thing of the ſecond ſide: ſo by the ground and this Figure you may eaſily conceaue it. And although I ſay nothing here of Towers, yet there may ȝ. at the leaſt, bee ſet above the Chappels in the corners: alſo, as in many other places it is ſhelved, the wozheman, vpon good occation, may alter ſome things: ſo althoſh that in Italy, and here in theſe Countreyes (where the ſunne ſhinet much) men deſire ſmall windowes for colonelle: neuertheleſſe, thoſe that dwell Northward, where it is rumatike, and many times cloſe weaſher, may, according to the ſituation, make the windowes great, and giue moſe light to the Temples, without breaking Oþder, as it is ſayd in the fourth Booke of the Venetian houſes.



The fist Booke.

The fourteenth Chapter. Fol. 13

As I promised in my fourth Booke, so I haue shewed divers fashions of Temples, viz. round, Double, or Cage wylde, foursquare, five cornerd, sixe cornerd, crosse cornerd, and crosse wylde, not only after the maner of the Ancients, but also seruynge for Christians, in such forme as are at this day made in Italy, and elsewher, whereby I thought I had suffitently performed my promise; but for that Temples or Churches are made here in these countries crosse-wise also, like Raphael's ground (of S. Peters Church in Rome) at my third Booke, therfore I will set two or thre more of that forme here, therien following the maner of the Ancients. The greatest going through, or walles in the middle of the Church, is 30. foot wide: the thre Chappells of halfe Circles, besides the 2. smalles walkes, are 25. foot wide, and shall stand somewhat without the wall. The Diameter of the Tribune is 36. foot: the foure small Tribunes, or round Rosettes, are in Diameter 21. foot, but they shall not come out of the roose. The crosse walles hath a doore on either side, and the 3. halfe Circles are each of them 25. foot wide. The hindermost halfe Circle where the high Alter standeth, is 31. foot wyde. Besores the Alter, there are two right-cornered Vestaries, being 21. foot in Diameter. Before, at the greatest going into the Temple, is the middlemost dore, 12. foot wyde, and the 2. small dores 6. foot. On the sides, the Dowers are 27. foot wyde: within the staynes, ther stande a kynde gate to shewe by the Helpe. And although this Temple hath many steps or staynes, you may make lesse.



Of diuers formes of Temples

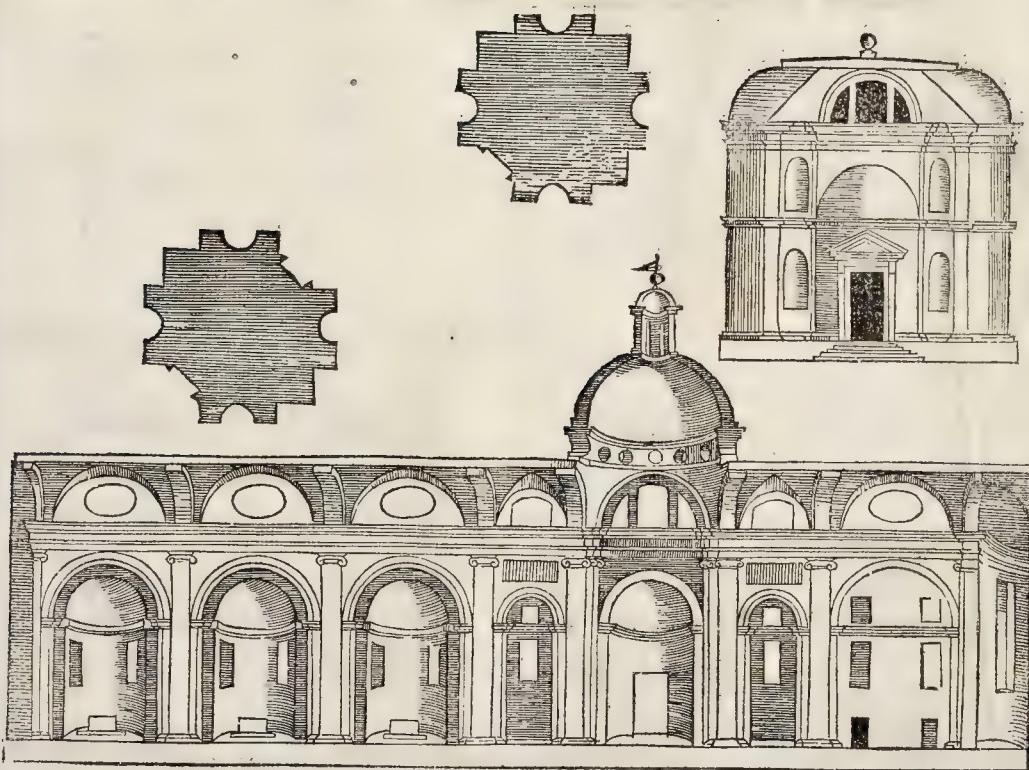
This is the Dethographic of the ground aforesayd, whereof the first Cornice standeth 62. foot high: which height devide in six parts, one part shalbe for Cornice, Frase, and Architrave, and the rest shall bee for the flat Pillars, which shalbe five foot broad, and of Dorica worke. The middlemost doore is 24. foot high: the two smaller on the sides shalbe 12. foot high. The great and the small doores also shalbe beautisched with some wrothes, as you see in this Figure, taking the particular measures out of the Dorica order, in my fourth Booke. The elevation or rising vp in the middle, shall to the upper part of the Cornice be 25. foot; and the Cornice thereof shall be the fourth part lesse then the other Cornices vnder it, made after the forme of the Dorica Chapter. The Frontispie is fiftene foot high, aboue it standes the couer of the Kettle, with this Banthorne vpon it, the measure whereof, a man may take out of that before. Below, vpon the first Cornice, besides the middlemost bearing vp, you shall make a Basement of five foot high; aboue that Basement, you must place the two Towers, which are 42. foot and an halfe high, making the Cornice the fourth part lesse then the other, formed after the Dorica Chapter. The third order shall be the fourth part lesse then the second, and the Cornice thereafter: the fourth order shall also be a fourth part lesse then the third, and the Cornice thereafter. The places brest-high, aboue these Cornices shalbe foure foot high: and from the List, to the point of the Pincoides, there are 36. foot. You may double the windowes out of my fourth Booke.



The fist Booke.

The fourteenth Chapter. Fol. 14

The Figure following sheweth the aforesayd Temple within, whereof the length and bredth is set downe in the ground: but here I will speake of the height. The Cōnīce shall stand high, & be as great as the uttermost, that is, the first part of 62. foot, but halbe made after the Ionica maner. The lat Pillars that also be Ionica: the Impost which beareth the Arches, shall also be Ionica; whose forme, touching the meatures, you shall find them all together orderly in my fourth Booke: all the Chappells shall have their light of themselves, as you see. Above the Chappells, the Roofs shall be broken like a Horne, therin to make an ouall round hole, that it may yeld more light: and that the Tribune may have more light then from the Lanthorne, you shall, from the couer vpwards, make a Frese with a List, and therein also make round holes so light. This small closed figure, standing alone, aboue the Temple, sheweth one of the side doores of the Temple, in the crasse-worke, whereof the doore is 10. foot wyde, and 20. high. The Architrane, Frese and Cōnīce, vnder the couer of Roofs, although the Pillars are broken after another maner, with the List of the Portall, shall nevertheless agree with the Cōnīcement that goeth round about the Temple. And although it is not here shewed how the wydeth space of the walke betweene the Pilasters and the rofes is, and how that the smalest walke is not so high roofed, nor the forme of the small Kettles and Vestries are not shewed, yet the warkeman may imagine it by the grounde: for he that undertaketh such a piece of worke, must not be vnskillfull.

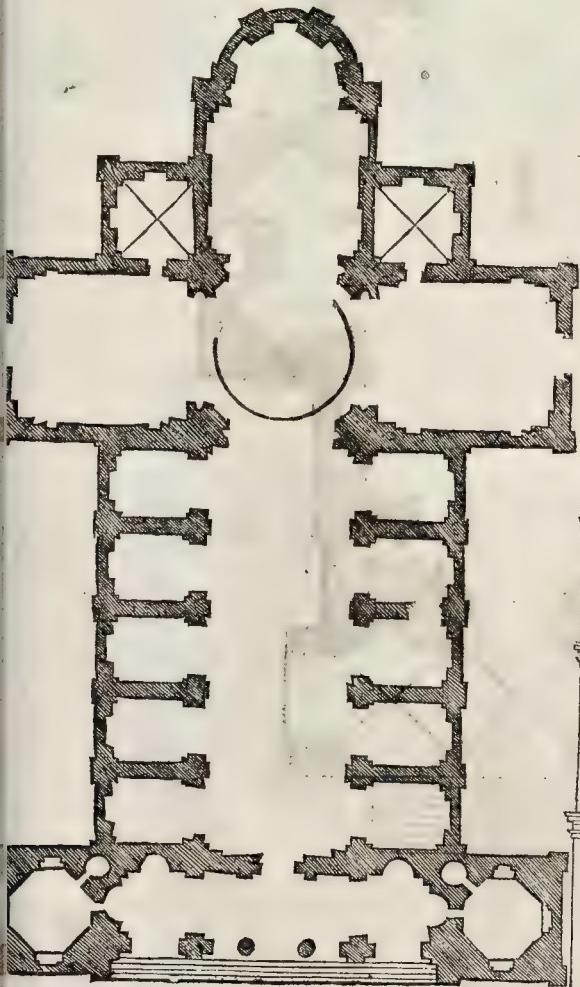
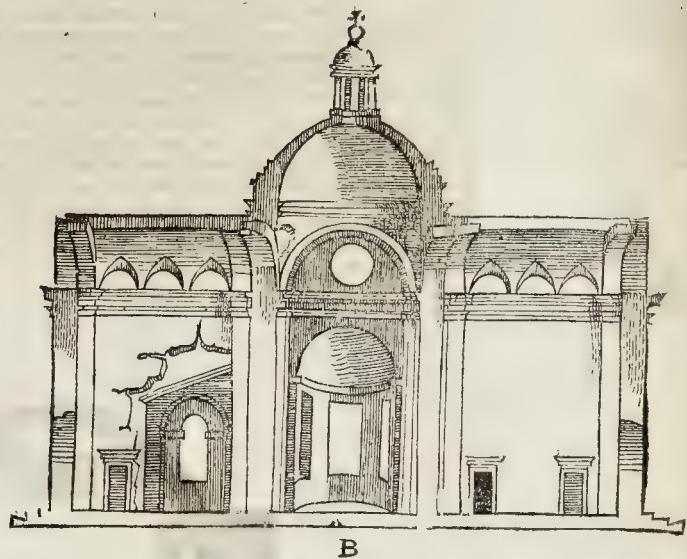


Of diuers forms of Temples.

This Temple following is 30. foote wide in the middle. The crosse worke, and also the Tribune, together with the high Quier, shall each of them containe 30. fot. The Arches which bear the Tribune, halbe 24. foote wide. The Pillars on the sides, where the Piches stand, halbe 5. foote broad. Each side of the Crosse in wch is 38. fot long, and shall each of them have a Dore. The part before the high Quier, towards the Altar, is 4. square. The Pilasters with the Piches, before the halfe Circle of the high Altar, are 5. foote broad, and stand from other 24. fot. The Piche or halfe Circle is 23. foote wide. In the 2. corners on the sides of the high Quier, there are 2. Tewtles, which halbe 17. foote wide in 4. square. From the Tribune to the principall going in, there shall stand 5. Chappells on eþher side, which halbe 5. foote within 4. square. The walles betwene both shall bee 4. foote thicke. The windowes halbe 6. foote wide, and there Altars shall stand. The wall at the Doores shall bee 4. foote thicke, and on the sides where the Piches stand, 3. foot. Here before there shall come a Gallery of 14. foote broad, and of 68. foote long. The Piches halbe 8. foote broad. On the sides of this Portall the Tewtles shall stand, and shall stand as broad out at the sides, as the crosse worke. The Diameter within the Towers is 18. foote: and althoþg, they be 8. square, they may also be made 4. square. The winding Stairies stand in the thickenesse of the wall.

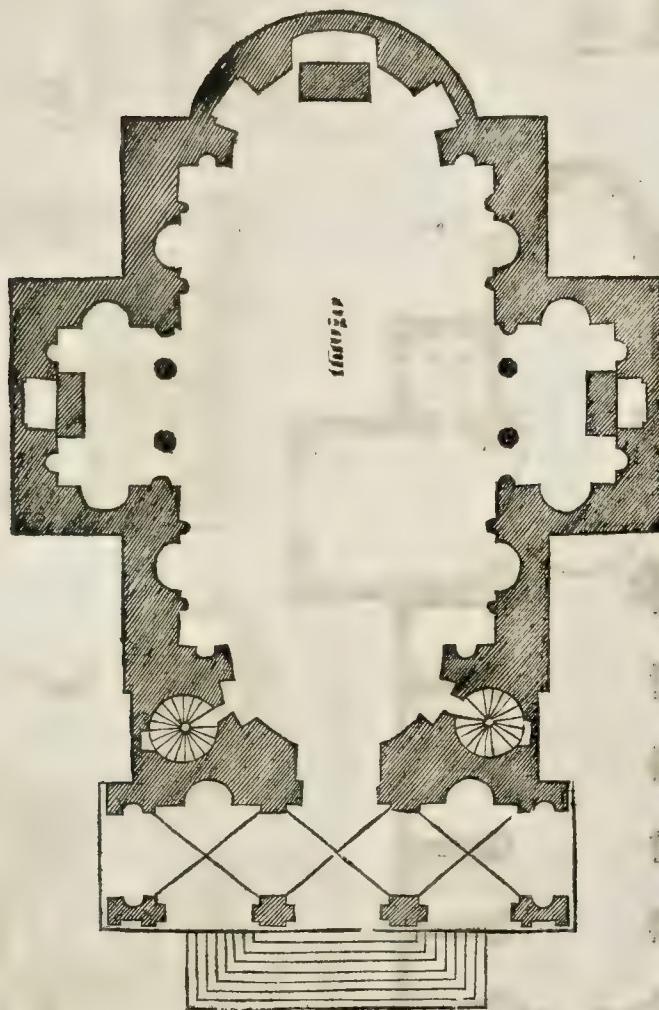
Touching the rayling bynight of the layd Temple, first I will speake of the Portall, which with the helpe of the fourth Booke, and through the ground, you may find the particular meaure of this Order. The portall above shall be flat without roose, to take no light away in the Temple. From the Pauement, to the top of the Cornice which goeth round about the Temple, it shallbe 47. foote high. The Architane, Fraſe and Cornice, are 3. foote. The 2. Order conſayneth 37. foote: and their Cornices shall bee a fourth part leſſe then the other: the ſame heights and Cornices shall alſo ſerue for the ſecond Order of the Towers, and halbe a fourth part leſſe then the ſecond Order; and the Cornice shall alſo leſſen the fourth part: above there shall stand a small riſing or elevation, whereon the Bettle ſhall reſt.

The Figure aboue the closed Temple, marked with A. sheweth the inner part of the 5. Chappells. The height from the pavement to the upp̄r part of the Cornice is 27. foote: the Cornice halbe 4. foote thereof, made like a Capitall Cornice. The other upp̄most Cornices halbe as high as the outermost, and betwene this firſt and the ſecond Cornices, there shall zonica flat Pillars stand; betwene them the windowes shall bee made. The other figure aboue that aforſaid, marked B. sheweth the Tribune, the Quier and the ſides of the crosse worke, with the open and the blnd Doores. Through the one ſide (which was purpoſely broken) you may ſee the Tewtles within. The Cornice under the Arches, which bear the Bettle, is like the other Cornice which goeth round about the Temple. The Cornice which is aboue the Arch, and comes under the Bettle, halbe ballard. The Lanthorne muſt bee made according to the other Lanthornes aforſhewed. The other part marked C. is one of the Doores on the ſides, and is in that maner coñered round. The Dore is 9. foote wide, and 18. foote high.



Of diuers formes of Temples

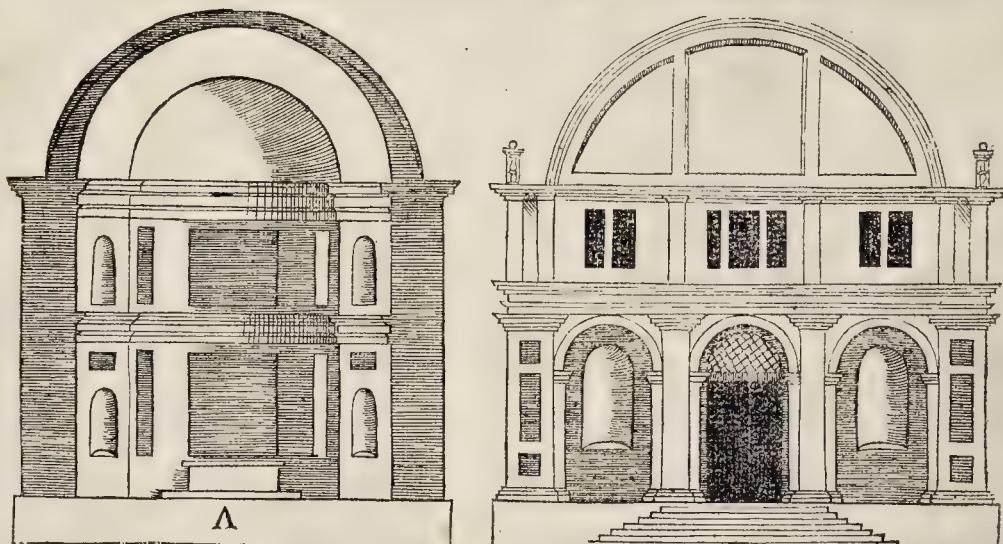
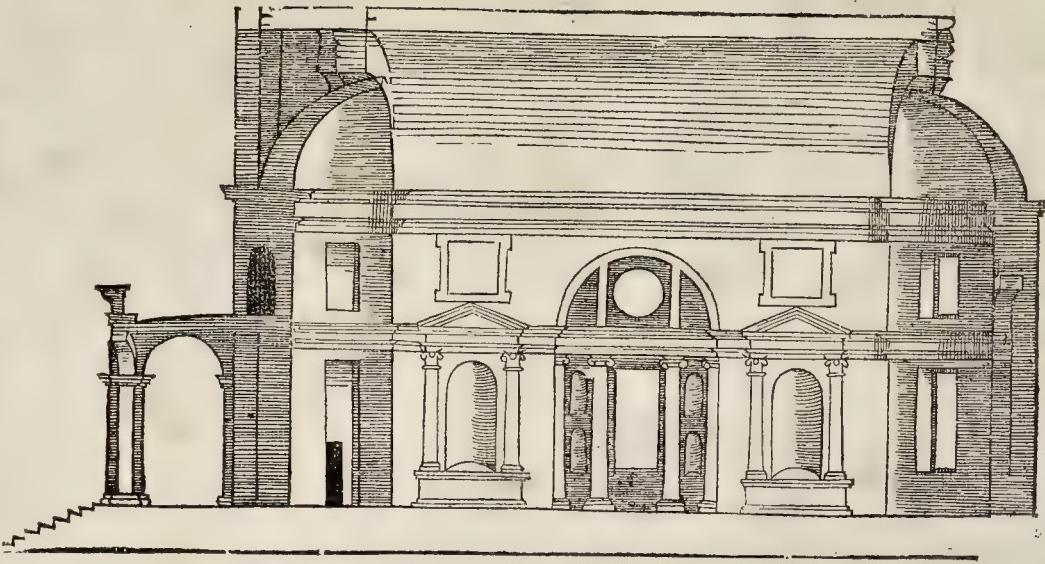
ALthough that in the Netherlands there are very fayre Temples made, as the maner in these dayes is, not onely with thare Iles or walkes in the body, but also faine: my meaning is not to write of such great Temples, for that each Towne hath her chiese Church: but thare are onely to make such Churches in places, where, by chance, the Churches are decayed, because in these dayes, men could hardly make them by againe in great forme; and to this end I set this last figure here, which is plainer then the other. It shalbe 36. foot wyde, and 54. foot long. At each end before and behynd, therell stand halfe a Circle of 24. foot in Diameter. This halfe Circle, where the high Altar standeth, hath two wondowes, each 6. foot wyde. The doore to enter into the Temple, shalbe 8. foot wyde. In the croise of the Temple therell stand two Chappells, being 18. foot long, and 12. foot broad. The wondowes behind the Altar shall be sixe foot wyde: all the great Niches are also sixe foot wyde, and the smalle thare foot. The Columnes are two foot thicke: the inter-Columnes in the middle, are 6. foot, and the other on the sides are 3. foot. The 4. Niches within the body, are beautiflye with round Columnes standing in the wall. Without the Temple therell be a Portall of 10. foot broad, and 52. foot long. The high Pilasters shalbe 6. foot broad, as counterforts, and the other shalbe thare foot broad. Within the thickenesse of the wall therell stand two payre of winding staires: and althoough this Church hath no Towers, yet you may make them on it, as the o.ther were.



The fist Booke.

The foureteenth Chapter. Fol. 16

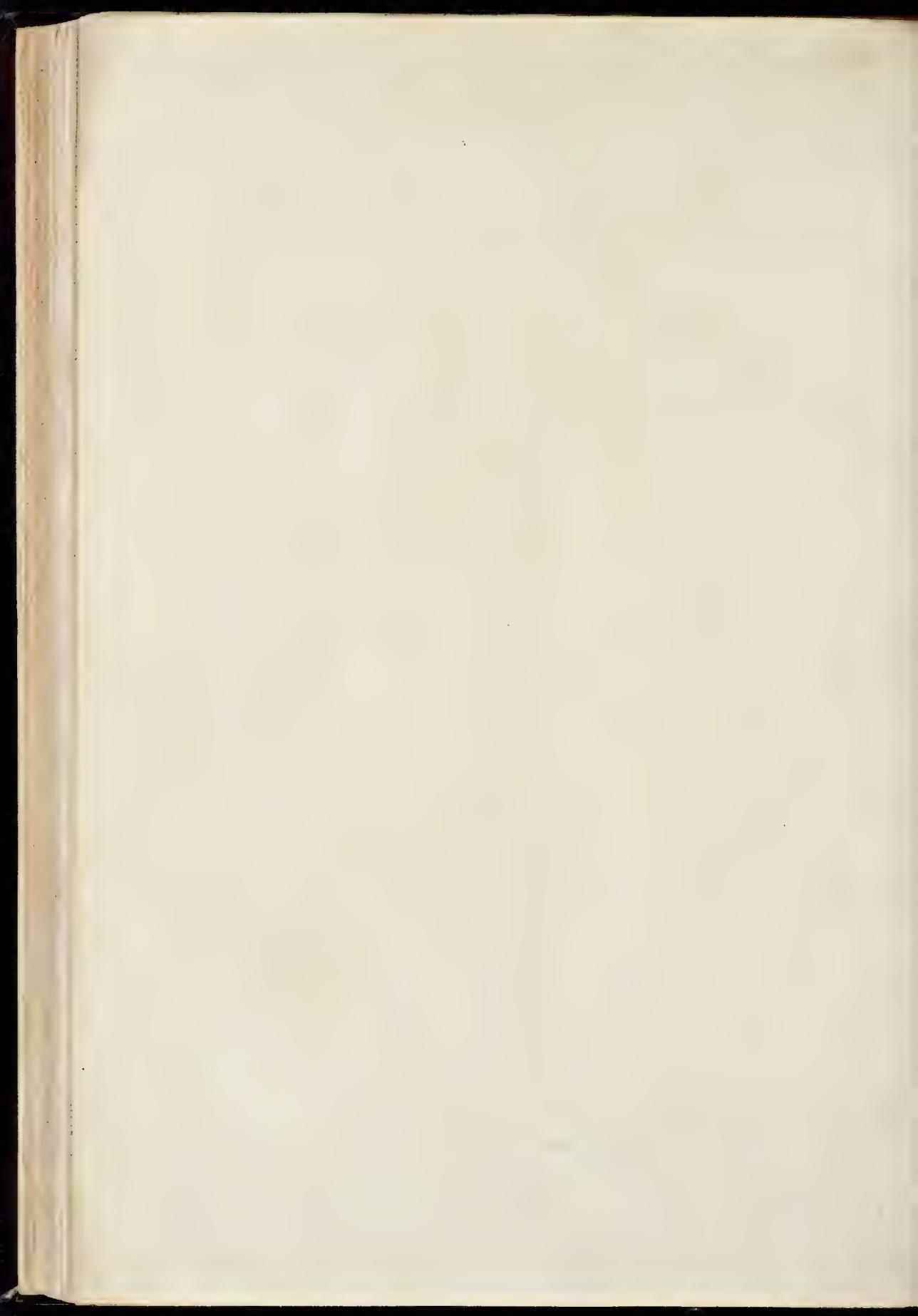
This Figure within is good to understand, and from the Pavement to the first Cornice, it is 21. foot high, whereof the Cornicement is a sixt part: the other is for the Ionica Columnes. The Pedestall of the Niches halfe the sixt part, whereon there stand Columnes of Corinthia. The Frontispieces are three foot above the Cornice: the blind windowes above may also be opened. The walkes, with the place brent high above the Portal, must bee made leaning forward for the water. The Chappels of the high Altar, marked A. haue small Pitches of 7. foot and an halfe high. The foursquare above the Altar, is for a table, broad 10. foot, and high 12. foot. The Temple without hath a Doricall Cornice, as high as the intermoss. The part of the second order hath Pillars, and Cornices vpon them of two foot, which Cornices shall be made according to the Impost of the Theater of Marcellus, in the fourth Booke: and for that above on the side, in the roose or couer, there is 3. fot of roome to spare, there may be a leaning place made, both for an ornament, and also for ease: the couer may be covered over with Lead.

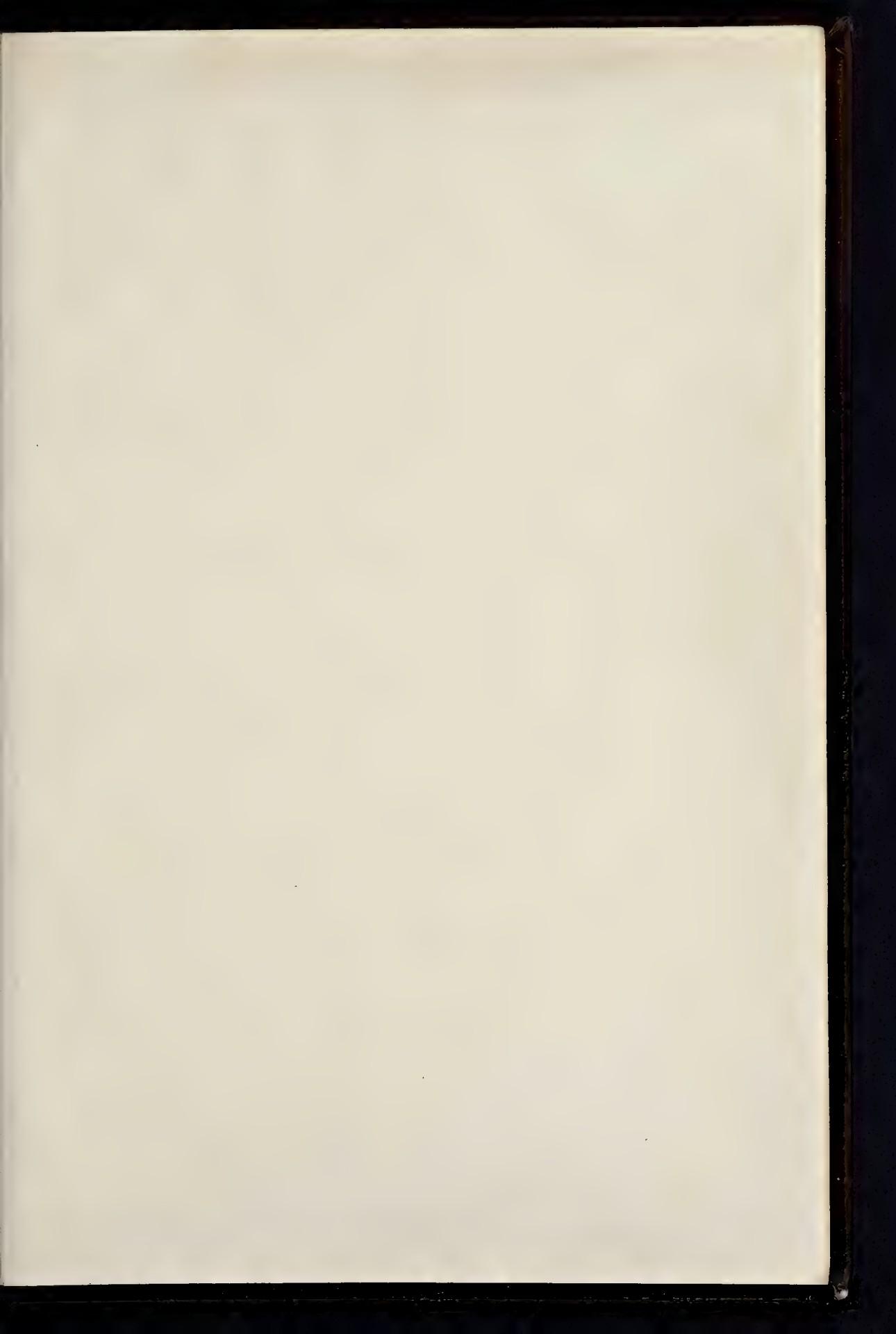


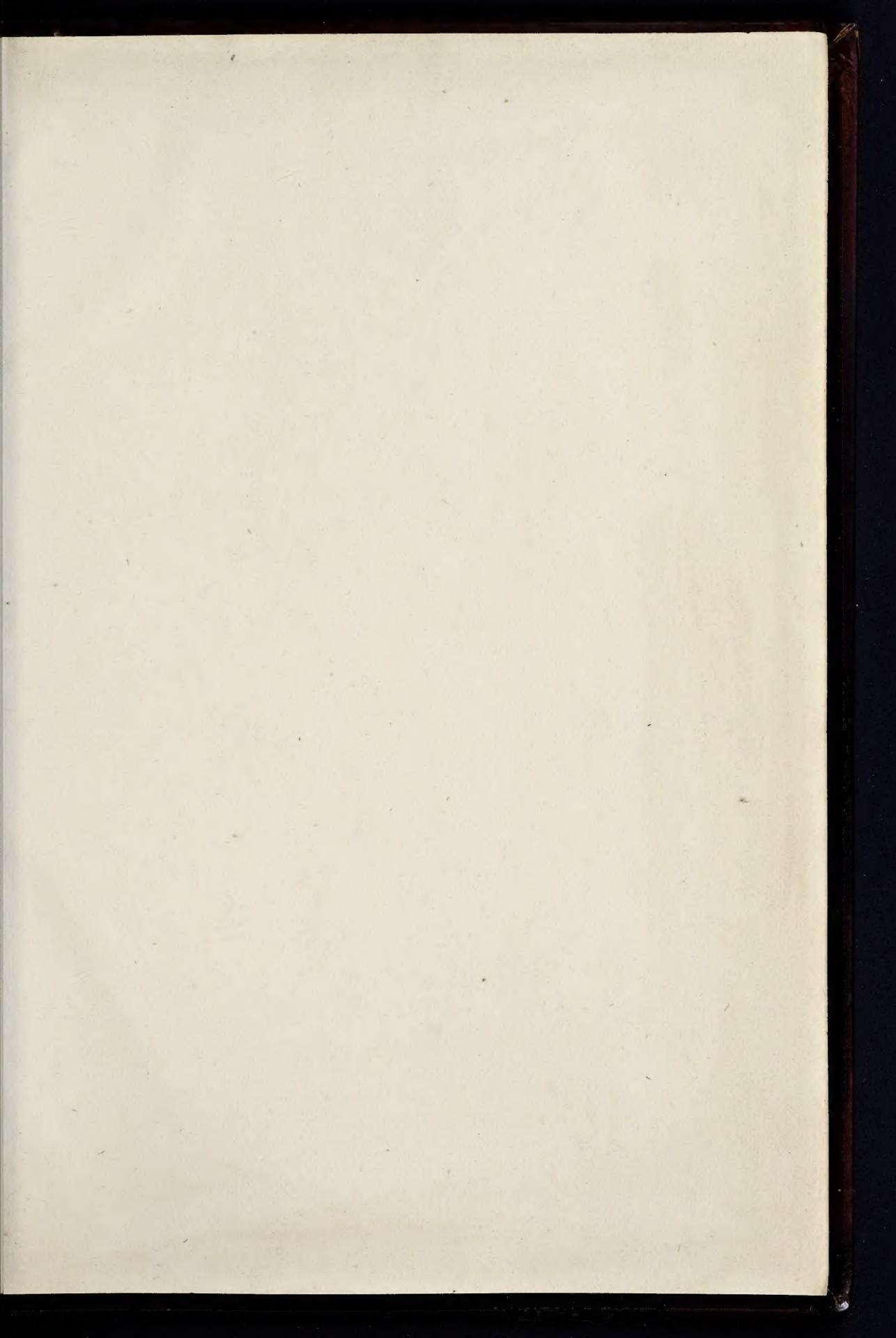
Here endeth the fist Booke: And this also is the end of the whole worke of Sebastian Serlius; Translated out of Italian into Dutch, and out of Dutch into English, at the charges of Robert Peake.

Printed at LONDON, by Simon Stafford. 1611.

B. W.







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